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REGENTS'
ANNUAL
REPORT

Fifteenth Annual Register

Nevada State University

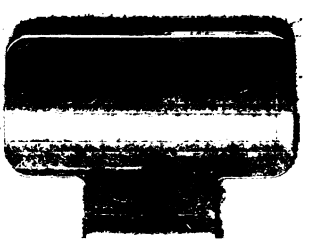
Reno, Nevada

1902

With Announcements for the
Academic Year of 1903-1904

Printed at the
State Printing Office
Carson City, Nevada

ANDREW MAUTE
Superintendent of State Printing
1903



FIFTEENTH ANNUAL REGISTER

OF THE

NEVADA STATE UNIVERSITY

FOR THE YEAR 1902

WITH

ANNOUNCEMENTS FOR THE ACADEMIC YEAR OF 1903-1904



CARSON CITY, NEVADA
STATE PRINTING OFFICE : : ANDREW MAUTE, SUPERINTENDENT
1903


TYPOGRAPHICAL
UNION
LABEL
WASHOE NO. 85

ANNUAL REGISTER.

OFFICE OF THE
BOARD OF REGENTS OF THE STATE UNIVERSITY,
RENO, NEVADA, January 10, 1903.

To His Excellency JOHN SPARKS, *Governor of the State of Nevada:*

SIR: The Regents of the State University have the honor to submit herewith the Annual Register of the University for the year 1902, containing the courses of study, general information, the membership of the Faculty, and the enrollment of the students, as required by the Act of the Legislature approved March 6, 1901.

By the Board of Regents:

J. N. EVANS, President.

GEO. H. TAYLOR, Secretary.

UNIVERSITY CALENDAR.

SECOND SEMESTER, 1902–03.

1903.		
January 6	Tuesday	Second semester begins.
February 22	Sunday	Washington's Birthday.
April 9–13	Thursday–Monday	Easter recess.

COMMENCEMENT SEASON.

May 22–28	Friday–Thursday	Final examinations.
May 29	Friday	Alumni Day.
May 30	Saturday	Observance of National Memorial Day.
May 31	Sunday	Baccalaureate Sunday.
June 1	Monday	Senior Day.
June 2	Tuesday	Thesis Day.
June 3	Wednesday	UNIVERSITY COMMENCEMENT.

SUMMER VACATION.

June 4	Thursday	Summer vacation begins.
August 31	Monday	Summer vacation ends.

FIRST SEMESTER, 1903–4.

September 1–3	Tuesday–Thursday	Examinations for admission.
September 1–3	Tuesday–Thursday	Reëxaminations to remove conditions.
September 3–5	Thursday–Saturday	Matriculation and registration of students.
September 6	Sunday	University convocation at 3 p. m. in Gymnasium.
September 7	Monday	Recitations and lectures begin.
November 26	Thursday	Thanksgiving Day.
December 18	Friday, 4:30 p. m.	First semester ends.

CHRISTMAS VACATION.

December 19	Saturday	Christmas vacation begins.
1904.		
January 5	Tuesday	Christmas vacation ends.

SECOND SEMESTER, 1903–4.

January 6–7	Wednesday–Thursday	Examinations for admission.
January 6–7	Wednesday–Thursday	Reëxaminations to remove conditions.
January 7–9	Friday–Saturday	Matriculation and registration of students.
January 10	Sunday	University convocation at 3 p. m. in gymnasium.
January 11	Monday	Recitations and lectures begin.
February 22	Monday	Washington's Birthday.
April 7–11	Thursday–Monday	Easter recess.
June 1	Wednesday	COMMENCEMENT.

NOTE: **Students who apply for matriculation or registration on other days than those named in the calendar will be charged a fee of one dollar.**

OFFICIAL ORGANIZATION.

THE REGENTS OF THE UNIVERSITY.

The Hon. J. N. Evans (1901–1905) Reno
The Hon. W. W. Booher (1903–1907) Elko
The Hon. Richard Kirman (1903–1905) Reno

OFFICERS OF THE BOARD OF REGENTS.

The Hon. J. N. Evans, President Reno
Mr. George H. Taylor, Secretary Reno

THE HONORARY BOARD OF VISITORS.

The Hon. C. H. Belknap, Chairman Carson City, Ormsby County
The Hon. J. W. Freeman Stillwater, Churchill County
The Hon. D. W. Virgin Genoa, Douglas County
The Hon. E. S. Farrington Elko, Elko County
The Hon. E. J. Henley Hawthorne, Esmeralda County
The Hon. Moses Reinhart Winnemucca, Humboldt County
The Hon. W. C. Gayhart Austin, Lander County
The Hon. A. S. Thompson Pioche, Lincoln County
The Hon. J. E. Gignoux Dayton, Lyon County
The Hon. Andrew Maute Carson City, for Nye County
The Hon. J. D. Torreyson Carson City, Ormsby County
The Hon. M. R. Averill Virginia City, Storey County
The Hon. T. V. Julien Reno, Washoe County
The Hon. Sol Hilp Ely, White Pine County
The Hon. Bert L. Smith Eureka, Eureka County

ASSOCIATION OF UNIVERSITY ALUMNI.

President Samuel B. Doten, '98
Vice-President Mrs. J. M. Fulton, '95
Secretary Grace V. Ward, '95
Treasurer Kate Riegelhuth, '97

EXECUTIVE COMMITTEE.

Samuel B. Doten, '98,
Mrs. J. M. Fulton, 95,
Grace V. Ward, '95,
Kate Riegelhuth, '97,
Elizabeth Stubbs, '99,
A. W. Ward, '96.

COMMITTEE OF COÖPERATION.

Jay H. Clemons, '96,
Albert W. Cahlan, '96,
Frank H. Norcross, '91,
Edwin E. Caine, '93,
Harry H. Dexter, '99.

ASSOCIATION OF NORMAL ALUMNÆ.

President Miss Stella N. Webster, '93
Vice-Presidents President of each class
Secretary Miss Lillian Douglas, '97
Corresponding Secretary Miss Jennie Jameson, '94
Treasurer Miss May McCormack, '02

Executive Committee—Miss Josephine M. Blum, '94, Miss Ethel Peckham, '00, Miss Frances Frey, '90, Miss Helena Joy, '90, Mrs. Henry Thurtell, '90.

MILITARY ESTABLISHMENT.

Commandant of Cadets:

Captain CHARLES T. BOYD, 10th Cavalry, U. S. Army.

BATTALION ORGANIZATION.

For instruction in Infantry Tactics and in military police and discipline, the Cadets are organized into a battalion of two companies and band. The officers and non-commissioned officers are selected from those Cadets who have been most studious, soldier-like in the performance of their duties, and most exemplary in their general deportment. The Officers are taken from the Senior class; the Sergeants from the Junior class; and the Corporals from the Sophomore class.

Major:

FRANK LUKE.

"A"	*Captains:*	"B"
R. W. HESSON[1]		F. WHITAKER[2]

First Lieutenants:

E. J. ERICKSON,[1] Battalion Adjutant.

J. O. MCELROY[2]	J. G. PECKHAM[3]

Second Lieutenants:

A. W. KELLY[2], Battalion Quartermaster and Commissary.

A. W. WOLF[1]	M. G. BRADSHAW[3]

J. H. PRICE, Battalion Sergeant-Major.

First Sergeants:

F. P. THOMPSON[1]	W. GRAHAM[2]

E. J. ROBERTS, Drum Major,

F. T. SMITH, Sergeant of Band.

Quartermaster Sergeants:

W. KEARNEY[2]	W. THOMPSON[1]

Sergeants:

W. P. CATLIN[3]	F. A. NATHAN[5]
E. I. LEAVITT[4]	F. J. DELONCHANT[8]
F. A. E. WELLER[7]	J. V. COMMERFORD[10]
M. KELLEY[9]	G. T. WEST[11]

Corporals:

C. SMITH, 1st[1]	J. NESBITT[2]
C. W. STARK[3]	W. POPE[4]
H. LOUDERBACK[5]	H. B. BULMER[6]
H. T. WILKERSON[7]	H. C. CHISM[8]
C. F. BULL[9]	J. PATTERSON[10]
W. J. O'NEILL[11]	C. SMITH, 2d[12]

The figures indicate relative rank.

UNIVERSITY ADDRESSES.

Annual Commencement Address, Wednesday, June 4, 1902, by President DAVID STARR JORDAN of Stanford University, California. Subject: "The Advance Agent of the New Century."

Annual Baccalaureate Sermon, Sunday, June 1, 1902, by President BENJAMIN IDE WHEELER of the University of California.

Annual Scholarship Address, Wednesday, June 4, 1902, by Hon. E. S. FARRINGTON of Elko, Nevada. Subject: "Duties of Citizenship."

Dr. W. H. PATTERSON: "The Best Self."

Dr. J. E. CHURCH, JR.: "Personal Reminiscences of German University Life." "A Midwinter Trip to Mt. Rose."

Judge SHUTTER COTTRELL: "The History and Organization of Trusts."

Rev. W. C. DRIVER: "The Aristocracy of Labor."

Judge A. L. FITZGERALD: "Money."

Rev. E. E. DODGE: "The Yosemite: How Created; its Falls and Cliffs." "Forest Trees of the Pacific Slope."

President J. E. STUBBS: "The Will of Cecil Rhodes." "College Topics."

Regent W. W. BOOHER: "Facts Concerning the Late Election."

Mrs. CHAS. T. BENDER: "Simple Thoughts on Complex Subjects."

Mr. H. F. EVANS: "Moral Passion."

Rev. ROBT. WHITAKER: "Religion and Evolution." "The Great Debate." "St. Theresa."

Dean HENRY THURTELL: "When a Man Comes to Himself." "The Outlook."

Hon. F. H. NORCROSS: "Our University; its Future."

Hon. FRANCIS G. NEWLANDS: "Women in Education."

Dr. ALLEN C. STECKLE: "N. S. U. Athletics."

Professor N. E. WILSON: "The Fairy Land of Science."

Mr. CHAS. JOHNSON: "Characteristics of Harvard."

Dr. W. E. N. STEWART: "Yale and its Traditions."

Senator W. M. STEWART: "A Broader Outlook."

Professor GEO. F. BLESSING: "The University Life."

Professor ROBERT LEWERS: "Characteristics of Handwriting."

Professor PETER FRANDSEN: "Science and Superstition."

Rev. JOHN THOMPSON: "A Word to Young People."

Hon. DAVID S. GRAY: "Greeting from Ohio Wesleyan University."

J. O. MCELROY and A. T. TAYLOR: "The Modern College Man and his Ideals."

Professor P. BEVERIDGE KENNEDY: "Cornell University."

Professor A. E. CHANDLER: "Duty of Water." "Irrigation in Nevada." "Some Irrigation Problems."

Professor CHAS. R. LEWERS: "Due Process of Law."

UNIVERSITY SCHOLARSHIPS AND PRIZES.

THE OSCAR J. SMITH SCHOLARSHIP of $100 was awarded to J. HENRY PRICE, '04.

THE MRS. OSCAR J. SMITH SCHOLARSHIP of $100 was awarded to JEANETTE E. CAMERON '04, and ADOLPHINE B. FINCK, Normal, '03.

THE UNIVERSITY ALUMNI SCHOLARSHIP of $50 was awarded to EMILY BERRY, Normal, '03.

THE NORMAL ALUMNÆ SCHOLARSHIP of $50 was awarded to BERTHA K. KNEMEYER, '05.

Special Scholarship for excellence in music presented by MR. and MRS. OSCAR J. SMITH, was awarded to RICHARD TOBIN.

UNIVERSITY DEBATES.

Senior-Junior Debate—Question: *Resolved*, That the United States Constitution is adapted to the government of colonial possessions. Affirmative: JNO. W. WRIGHT, MARK KELLEY, ALLEN S. EDE, Class of 1904. Negative: JNO. O. MCELROY, ALFRED T. TAYLOR, MAY WILSON, Class of 1903.

Sophomore-Freshman Debate—Question: *Resolved*, That Cuban reciprocity as laid down by President Roosevelt in his messages should be made the policy of the United States. Affirmative: BEULAH HERSHISER, HAROLD LOUDERBACK, L. F. PIKE, Class of 1905. Negative: D. R. SULLIVAN, G. E. PALMER, WOLFGANG MORGENEIER, Class of 1906.

Reno High School-Crescent Club Annual Debate—Question: *Resolved*, That the education of the American negro should be industrial rather than liberal. Affirmative: INEZ HOYLAND, GUY HARRIS, HOMER BENDER, Reno High School. Negative: ISABEL MILLER, LEROY PETERSON, MILAN DAVIDOVICH, Crescent Club.

Nevada State University-University of Utah Annual Debate—Question: *Resolved*, That the whites of the Southern States are justified in using every peaceable means to maintain their supremacy over the negroes. Affirmative: WILL RAY, BURGESS YOUNG, A. ELGREEN of the University of Utah. Negative: GERTRUDE SHEEHY, GEO. E. PALMER, JNO. S. CASE of the Nevada State University.

FACULTY AND INSTRUCTORS.

JOSEPH EDWARD STUBBS,

President of the University, Professor of Economics and Ethics.

B.A., The Ohio Wesleyan University, 1873; M.A., 1876; Honorary D.D., German Wallace College, 1890; Instructor Greek and Latin, The Ohio Wesleyan University, 1872–75; Superintendent of Schools, Ashland, Ohio, 1880–86; President Baldwin University, Ohio, 1886–94; President Ohio College Association, 1891–2; President Association of American Agricultural Colleges and Experiment Stations, 1899–1900.

HENRY THURTELL,

Dean of the Faculty, Professor of Mathematics and Mechanics.

B.Sc., Michigan Agricultural College, 1888.

MARY WHITESIDES EMERY,

Professor of Pedagogics and English.

M.A. in Pedagogics, Nevada State University; Illinois State Normal School.

ROBERT LEWERS,

Professor of Political Economy and Principal of the Commercial School.

RANSOM H. McDOWELL,

Professor of Agriculture and Animal Husbandry.

B.Sc., Michigan Agricultural College, 1874; M.A., 1900.

NATHANIEL ESTES WILSON,

Professor of Chemistry and Dairying.

B.Sc., Maine State College, 1888; M.Sc., Maine State College, 1893.

THOMAS W. COWGILL,

Emeritus Professor of English Language and Literature.

B.A., Harvard University, 1883; M.A., Vanderbilt University, 1888.

RICHARD BROWN,

Superintendent of Buildings and Grounds.

JAMES EDWARD CHURCH, JR.,

Professor of the Latin Language and Literature.

B.A., The University of Michigan, 1892; Ph.D., The University of Munich, 1901.

LAURA DE LAGUNA,

Associate Professor of the Modern Languages.

B.A., Leland Stanford Junior University, 1894.

ANNA HENRIETTA MARTIN,

Lecturer in History of Art.

B.A., Nevada State University, 1894; B.A., Leland Stanford Junior University, 1896; M.A., Leland Stanford Junior University, 1897.

JENNIE ELIZABETH WIER,
Associate Professor of History.
B.D., Iowa State Normal School, 1893; B.A., Leland Stanford Junior University, 1901.

GEORGE FREDERICK BLESSING,
Professor of Mechanical Engineering.
B.M.E., Kentucky State College, 1897.

LYSANDER WILLIAM CUSHMAN,
Professor of the English Language and Literature.
B.A., Pierce Christian College, 1883; B.A., Harvard University, 1886; M.A., Drake University, 1899; Ph.D., Göttingen, 1900.

GEORGE DAVIS LOUDERBACK,
Professor of Geology, Physics and Mineralogy.
B.A., University of California, 1896; Ph.D., University of California, 1899.

LAWRENCE F. J. WRINKLE,
Professor of Mining and Civil Engineering.
Massachusetts Institute of Technology, 1870.

PATRICK BEVERIDGE KENNEDY,
Associate Professor of Botany and Horticulture.
B.S.A., University of Toronto, 1894; Ph.D., Cornell, 1899.

PETER FRANDSEN,
Assistant Professor of Zoölogy and Bacteriology.
B.A., Nevada State University, 1895; A.B., Harvard University, 1898; A.M., Harvard University, 1899.

GEORGE J. YOUNG,
Professor of Metallurgy and Mining.
B.S., University of California, 1899.

MILDRED MAUDE WHEELER,
Instructor in Latin and Mathematics.
B.A., Nevada State University, 1896; M.A., University of California, 1898.

SAMUEL BRADFORD DOTEN,
Assistant Professor in Mathematics and Entomology.
B.A., Nevada State University, 1898.

KATE BARDENWERPER,
Instructor in Domestic Arts and Science.
Armour Institute of Technology, 1900.

ADA EDWARDS,
Instructor in Hygiene and Physical Training for Women.
Leland Stanford Junior University.

LEWIS ANDREW DARLING,
Instructor in Mechanical Engineering and Drawing.
B.M.E., Kentucky State College, 1900.

MRS. ALICE L. LAYTON,
Instructor in Vocal Music.
Graduate New England Conservatory of Music.

JOSEPH ALFRED WILLIAMS,
Instructor in English.
A.B., Washington University, 1902.

ROBERT WHITAKER,
Lecturer in Ethics and Public Speaking.
Newton Theological Institute, 1887.

CHARLES T. BOYD,
Professor of Military Science and Tactics.
U. S. Military Academy, West Point, 1896; Captain 10th Cavalry, U. S. Army; Major, 37th Infantry, U. S. Volunteers.

ROMANZO ADAMS,
Professor of Education and Sociology.
Ph.B., University of Michigan, 1897; Ph.M. University of Michigan, 1898.

GORDON H. TRUE,
Professor of Agriculture and Animal Husbandry.
B.S., University of Wisconsin, 1894.

HARRY HERBERT DEXTER,
Librarian.
B.A., Nevada State University, 1899.

MRS. NETTIE W. BLUME,
Mistress of the Girls' Cottage.

ALEXANDER WISE,
Instructor in Charge, Virginia City Mining Class.
B.S., University of California, 1900.

CHAS. R. FITZMAURICE,
Assistant in Chemical Laboratory.

ALLEN C. STECKLE,
Gymnasium Director.
M.D., University of Michigan, 1901.

ELIZABETH S. STUBBS,
Office Secretary.
B.A., Nevada State University, 1899.

CAROLYN M. BECKWITH,
Assistant Office Secretary.

FACULTY ORGANIZATION.

Chairman PRESIDENT OF THE UNIVERSITY
Vice-Chairman Dean HENRY THURTELL
Registrar Professor ROBERT LEWERS

STANDING COMMITTEES OF THE FACULTY.

The President of the University is *ex officio* a member of all Standing Committees, and an active member of the Committee on Student Affairs.

I. ON STUDENT AFFAIRS—Dean Thurtell, Professors Lewers, Wilson, Church, Young, and Superintendent Brown.

II. ON CLASSIFICATION—Dean Thurtell, Professors Wilson, and Frandsen.

III. ON ADMISSION AND ACCREDITING OF SCHOOLS—Professors Church, Cushman, de Laguna, and Wier.

IV. ON EXAMINATION—Professors Doten, Adams, and Miss Wheeler.

V. ON CONDITION AND REEXAMINATIONS—Professors Young, Darling, and Kennedy.

VI. ON DEBATING AND LITERARY SOCIETIES—Professors Cushman, Frandsen, de Laguna, and Wier.

VII. ON ATHLETICS—Professors Wilson, Blessing, and Kennedy.

VIII. ON THESES AND COURSES OF STUDY—Professors Louderback, Wrinkle, Frandsen, Blessing, and Adams.

IX. ON LIBRARY AND PUBLICATIONS—Librarian Dexter, Professors Church, and Adams.

X. ON GRADUATION AND HONORS—The Faculty as Committee of the Whole.

XI. ON MILITARY AFFAIRS—Captain Charles T. Boyd.

XII. ON SCHEDULE AND RECORD—Professors Lewers, Louderback, and Doten.

XIII. IN CHARGE OF BUILDINGS AND GROUNDS—Superintendent Richard Brown.

XIV. EDITORIAL BOARD—Professors Church, Louderback, and Adams.

AGRICULTURAL EXPERIMENT STATION.

THE BOARD OF CONTROL.

Hon. J. N. Evans (1901–1905)	Reno
Hon. W. W. Booher (1903–1907)	Elko
Hon. Richard Kirman (1903–1905)	Reno
Mr. George H. Taylor	Secretary

STATION STAFF.

Joseph E. Stubbs, D.D., LL.D.	Director

PUBLICATIONS.

Nathaniel E. Wilson, M.Sc.	Vice-Director

CHEMISTRY AND DAIRYING.

P. Beveridge Kennedy, Ph.D.	Botany, Horticulture and Forestry
Peter Frandsen, A.M.	Zoölogy and Bacteriology
Samuel B. Doten, B.A.	Entomology and Meteorology
Gordon H. True, B.S.	Agriculture and Animal Husbandry
Theodore W. Clark	Superintendent of Farm
Harry H. Dexter, B.A.	Librarian
Elizabeth Stubbs, B.A.	Stenographer

ORGANIZATION, EQUIPMENT AND ADMINISTRATION.

FOUNDATION.

The Nevada State University is the head of the educational system of the State of Nevada. It is the only institution of university or college grade and equipment within the State. The Constitution of Nevada declares that "the Legislature shall encourage, by all suitable means, the promotion of intellectual, literary, scientific, mining, mechanical, agricultural and moral improvement," and shall provide for "the establishment of a State University which shall embrace departments for agriculture, mechanic arts and mining." The University was first located at Elko by a law approved March 7, 1873, but was removed to Reno by an Act of the Legislature approved March, 1885, and was formally reopened March 31, 1886. Only a preparatory school was maintained at Elko. The University proper begins with the academic year 1886-87. The support of the University is adequately provided for under the beneficent provisions of the General Government to enable "each State and Territory to maintain at least one college, where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and mechanic arts"; and further by means of biennial appropriations from the Legislature of the State.

COLLEGES AND SCHOOLS.

The organization of the University comprises the following Colleges and Schools which aim to meet the best ideas and ideals of modern University life and training:

I. THE COLLEGE OF AGRICULTURE:
 1. The School of Agriculture.
 2. The School of Domestic Arts and Science.
 3. The Short Course in Agriculture.
 4. The Short Course in Dairying.
 5. The Short Course in Domestic Science.

II. THE COLLEGE OF ARTS AND SCIENCE:
 1. The School of Liberal Arts.
 2. The School of General Science.

III. THE COLLEGE OF APPLIED SCIENCE:
 1. The School of Mining and Metallurgy.
 2. The School of Mechanical Engineering.
 3. The School of Civil Engineering.

IV. THE STATE NORMAL SCHOOL:
 1. The Latin Course.
 2. The Science Course.
 3. The University Course, leading to the degrees of B.A. or B.S.

V. UNIVERSITY HIGH SCHOOL (preparatory to University Colleges and Schools):
 1. The Latin Course.
 2. The German Course.
 3. The Commercial Course.

UNIVERSITY HIGH SCHOOL.

In order to supply the need of a good secondary and business education for that large class of young people in the State who do not live within reach of the advantages of a

high school, the University maintains preparatory schools of high grade in respect of both discipline and instruction, which have courses of study arranged with particular reference to the University courses.

AFFILIATED SCHOOLS.

The principals of the leading high schools have signified their purpose to prepare students for the University courses, and will meet, so far as possible, the University requirements for admission. All such schools will be designated as "Affiliated Schools," and their graduates will be admitted upon certificate. The University will promote harmony of action and coöperation between its Faculty and the principals of high and grammar schools, with a view to advancing the interests of secondary and higher education in the State.

ADVANTAGES OF SITUATION.

Reno, the seat of the University, is a thriving town of ten thousand inhabitants, situated in the beautiful Truckee valley, and at the junction of three railroads, namely, the Southern Pacific railway, a trunk line between the East and the West; the Virginia and Truckee railway, and the Nevada-California-Oregon railway. The noble mountains which encircle the valley, the pure air and soft sunshine give the town an enviable reputation for health and beauty. Excellent public schools, churches of all the leading denominations, both Catholic and Protestant, a moral and cultured community, offer here the proper conditions for the prosperity and development of University life and work.

BUILDINGS AND GROUNDS.

The University Campus has an area of from thirty-five to forty acres, and is beautifully located on an eminence overlooking the city. There are twelve buildings now in use.

MORRILL HALL.

Morrill Hall is a three-story brick building with a large basement. The office of the President of the University and the physical laboratory occupy the first floor, the library occupies the entire basement story, class rooms for ancient languages and history occupy the second floor, while the third floor is given to the use of the University Commercial School and the Drawing Department of the School of Mechanical Engineering.

STEWART HALL.

Stewart Hall is also a three-story and basement structure. The first floor is occupied by the professional and training department of the State Normal School and by class rooms for Modern Languages and Mathematics. Upon the second floor are lecture rooms for English and Mathematics, and the third floor is devoted to the School of Domestic Arts and Science. The basement is in use for the present as a dining hall.

HATCH STATION.

Hatch Station was built by the State for the sole use of the Experiment Station, which is supported by the General Government for the purpose of original investigation in the various subjects related to scientific and practical agriculture. The first floor of Hatch Station is occupied by the Departments of Agriculture, Botany and Horticulture. The second floor is given to the Departments of Zoölogy, Bacteriology and Entomology; and the third floor is occupied by the Departments of Entomology and Meteorology and by the Station Photographic Laboratory.

MINING BUILDING.

The first floor of the Mining Building is occupied by the Departments of Civil Engineering and Geology. The second floor contains one lecture room, the Metallurgical Laboratory and the Mineralogical Laboratory. The Assay Office occupies temporary quarters in another building.

Analyses and Assays.

Under an Act passed by the State Legislature, March 16, 1895, citizens of the State of Nevada may send ores and minerals to the State University and have the same analyzed

and assayed without cost. (Secs. 1402–1405, incl., Compiled Laws of Nevada.) The attention of the public is called to the fact that the law expressly states that only citizens of the State of Nevada may so send ores and minerals and that the same must have been taken "from within the boundaries of the State of Nevada." This provision is observed in so far as is practicable. Where persons are known not to be citizens, or the material comes from without the confines of the State, such material is not examined, but is held subject to the wishes of the sender.

The law further provides that the result of the analysis shall be sent to said citizen together "with as near as possible an explanation of their (ores and minerals) uses and value in market, and there shall be kept at the State University a book of record, open for inspection, under such rules as may be made by the Regents, of all minerals, ores or other matters sent, together with the history of such mineral and other matters, stating the name of the person or persons from whom received, the district and county from which it came and all other matters that may be beneficial touching the same."

In compliance with the above section reports have been rendered, and a record book kept. In order to make reports as accurate as possible, it is suggested that citizens supply all information, as indicated in the above extract, that may have any influence in determining the value of an ore or mineral. Lack of sufficient data necessitates almost always general statements concerning value.

No rules have been made by the Board of Regents concerning access to the record book. The following has been recently adopted, viz: Citizens may inspect reports and records only in so far as they relate to their own ores or minerals.

In respect to the analytical and assaying work, the Department of Mining, which has been assigned this work by the President of the University, has adopted the following: Specimens and samples are first carefully examined, and, if a quantitative analysis is necessary to determine the value, the same is made. In all cases where the results of a preliminary examination are doubtful, a quantitative analysis is made. No quantitative work is done upon small hand specimens, unless for the purpose of identifying a mineral, as the results of such work are almost always misleading. Assays are made in duplicate and values determined. Reports are made as follows: Where the value of gold is above $5 per ton, "The gold assay value is above $5 per ton"; where the value is less than but still in the neighborhood of $5 per ton, "The gold assay value is less than $5 per ton; where the gold exists in traces only, "Gold is present in traces only." A similar form of report is given in the case of silver and of combined gold and silver values. The State law provides that returns for gold and silver above $5 per ton in value shall read, "Test for gold" or "Test for silver." As the meaning conveyed by these terms is not well understood the foregoing form of report was adopted as fulfilling the intentions of the law and at the same time being more intelligible to the prospector or other person receiving the report. The accuracy of the quantitative work is of the same grade as that for rapid "commercial analyses," and is unchecked unless otherwise stated. Samples and specimens are examined in the order in which they are received.

Inasmuch as this work is subordinated to the work of instruction, returns upon samples and specimens are sent out sometimes after a considerable lapse of time. The Department endeavors to send out reports as soon as possible. The time varies from three to ten days after receipt of samples.

Wherever possible, citizens who avail themselves of the privileges afforded them by this Act should send in ample quantities of material, which facilitates the examination and gives more trustworthy results than are obtained from small specimens. Samples in addition to hand specimens should be sent for examination. All samples and hand specimens should be distinctly marked with name of consignee and wrapped separately, and a letter giving locality and other information should accompany them.

MECHANICAL BUILDING.

The workshop is a brick building of superior design. The ground floor is applied to the use of the machine shop, the blacksmith shop, and the boiler room. The wood shop occupies the second floor, and is fitted up with one power jig saw, one band saw, one Universal wood-working machine, four wood lathes, one Universal trimmer, one grindstone. There are twenty-four benches and an equal number of lockers. Each locker contains the following tools;

One rip saw, one crosscut saw, one hack saw, one bench saw, one set Bailey's planes, one set of chisels, one oil stone, one scratch awl, one steel square, one bevel, one two-foot rule, one pair of dividers, one hammer, one mallet, one marking gauge, one drawing knife, one set of awls, one set of screwdrivers, one nail set, two try squares and one broad hatchet. The tool room is provided with every needed variety of wood-working tools. The machine shop is furnished with one tool-room lathe, two screw-cutting lathes, one polishing lathe, one shaper, one Universal milling machine, one Universal cutter grinder, five bench vises, one wet emery wheel, one dry emery wheel, one alternating current dynamo, one direct current dynamo, and a tool room equipped with small machine tools and certain experimental apparatus for the use of mechanical engineering students. The blacksmith shop has forges and the necessary tools.

CHEMISTRY BUILDING.

A commodious stone building, 90 feet by 45 feet, with a rear wing 50 feet by 20 feet, is the home of the Chemical Department both of the University and the Experiment Station. On the first floor is located the laboratory for qualitative analysis and general chemistry, accommodating sixty-five students; the laboratory for quantitative analysis, accommodating thirty-six students, together with the necessary stockrooms, balance rooms and laboratory for special work, are also on this floor. On the second floor is a lecture room, the Experiment Station laboratory, a large stock room, a room for preparing apparatus for demonstration of experiments before classes, the office of the Chemical Department, and a suite of rooms which will be furnished for an organic laboratory. In the basement is a large acid and chemical room and the boiler room. The building is lighted by electricity.

LINCOLN HALL.

The State Legislature, recognizing the importance of placing the benefits of the University within the reach of all the deserving young men and women of the State, authorized the building of two Student Halls, after the plan of such halls in use by students of the larger Eastern colleges, and appropriated thirty-five thousand dollars for the purpose. The first of these two buildings is known as "Lincoln Hall," and is a tasteful and comfortable home for one hundred young men. The plans of Lincoln hall were drawn after a careful study of the best modern college halls, and seem to meet every requirement of a cultivated taste.

"THE COTTAGE."

The second building, known as "The Cottage," is a delightful home for young women. It is located upon the plaza in the southwest part of the campus, and overlooks the town and the valley. The construction material is brick and granite. The architectural features are those of a commodious private dwelling. Besides the single and double rooms, which are sufficient for forty young women, there is a reading room and a parlor for the students and a private parlor and sitting room for the Mistress of the Cottage.

THE GYMNASIUM.

The gymnasium is a modern structure 60 feet wide and 120 feet long. It is equipped both as an armory for the use of the military department and as a gymnasium for athletic training. The equipment is modern and ample for all college purposes. Convenient toilet rooms with hot and cold water and lockers for the use of all students are provided.

THE LIBRARY.

The library contains about eight thousand five hundred bound volumes and five thousand five hundred pamphlets. The books have been selected with particular reference to the requirements of the several departments of study. The library is classified according to the Dewey Decimal Classification System, and is supplied with a very complete card catalogue. There is a complete and serviceable collection of the latest and best books of reference. The reading room is supplied with daily and weekly newspapers and with the best literary and scientific periodicals. Many of the papers are furnished to the University through the kindness of their publishers. The library is open from 8 o'clock in the morning until 5 in the afternoon on all days that the University is in session, and from 8 a. m. to 12 m. on Saturdays.

THE LABORATORIES.

The University aims to make its science work valuable by developing as far as possible well-equipped laboratories in each subject offered.

Quantitative Laboratory—Equipped with gas, water, fume closets, steam closets, steam evaporators, drying ovens, etc. In connection with this is a balance room containing six sets of balances, as well as a special laboratory for the analysis of water and for such determinations as cannot be made in the main laboratory.

Qualitative Laboratory—Will accommodate sixty-five students, each one being provided with a locker and drawer for keeping apparatus. The laboratory is completely fitted with water, gas and fume closets.

In the *Experiment Station Laboratory* those students who are interested in agricultural work have an opportunity to pursue this work according to the methods adopted by the Association of American Agricultural Chemists.

Biological Laboratories—These laboratories are used for the subjects of Physiology, Botany and Zoölogy. They are equipped with dissecting tables, trays, sinks, compound microscopes, dissecting microscopes, microtomes, mounting material, chemicals, balances, etc.

The *Histological and Bacteriological Laboratory* is furnished with modern apparatus, such as incubators, steam sterilizers, hot-air sterilizers, serum inspissators, microscopes, etc. This laboratory has also the beginnings of an ornithological collection now being made by the Experiment Station, which will be used for illustrative purposes in the courses in Zoölogy.

Entomological Laboratory—This laboratory has been recently equipped for entomological research. It contains also the photographic laboratory of the Experiment Station.

The laboratory for *Geology and Mineralogy* has good collections of minerals, rocks, and fossils arranged for study. Courses are offered in the physical and blow-pipe determination of minerals, the determination of rocks and fossils by observational study, and the preparation of thin sections and microscopical study of rocks.

Assaying and Metallurgical Laboratories—These laboratories are at present occupying temporary quarters in the Mining and Mechanical Buildings.

Physical Laboratory—The Regents have decided to equip a new physical laboratory. It is expected that the elementary part will be opened for students next fall, and the advanced part the following year.

SCIENTIFIC COLLECTIONS.

The Departments of Botany, Zoölogy, Entomology, Geology and Mineralogy are continually adding scientific material to their collections, but at present no suitable arrangements can be made for their proper disposal and exhibit, the room not being available. Three cases illustrating the minerals and rocks of Eastern and Western Nevada and other mining States respectively are set up in the Mining Building. As soon as the opportunity offers the University expects to arrange and exhibit its collections so that they may be available to students and visitors.

THE ACADEMIC YEAR.

The Academic year of forty weeks begins about the 1st of September and closes about the 1st of June. The year is divided into two terms by the holiday vacation. Examinations are held at the close of each of the two terms.

GOVERNMENT OF THE STUDENTS.

In the government of the University the largest liberty consistent with good work, good order and good character is given the students. There is no formulated code of laws governing their conduct. Their habits of life are expected to be such as to promote daily cultivation of high moral character. They are expected in all their relations to each other and to the University to observe the usages of good society without requiring special regulations for that purpose. They are expected to be punctual and regular in their attendance upon all University exercises. The State provides its bounty for the earnest and industrious student. The indolent or the unworthy will not be retained in the University.

It is assumed that students come to the University for a serious purpose, and that they will cheerfully conform to such regulations as may be from time to time made by the Faculty. Conduct inconsistent with the general good order of the University, if repeated after admonition, will be followed by suspension or dismissal. It is the aim of the Faculty so to administer the discipline of the University as to maintain a high standard of integrity and a scrupulous regard for the truth; and *the attempt of any student to present as his own the work of another, or to pass any examination by improper means, is regarded as a most serious offense, rendering the offender liable to immediate suspension or expulsion.*

DISCIPLINE.

The discipline of the University will be kindly but firmly maintained. Young men and young women who do not intend to give themselves up to the very highest demand of University life are advised to remain at home or to go elsewhere. The same regulations and restrictions will apply to all students, whether they reside in one of the college halls or in any of the homes in the town of Reno.

THE FACULTY.

The Faculty consists of the President, the Dean, professors, associate professors, assistant professors and instructors. Its routine work is divided among the several standing committees. The Faculty also acts as an advisory body on any question of general policy that may be submitted to it by the President or the Regents.

PUBLICATIONS.

There are two University publications. The University Bulletin is published by the Editorial Board of the Faculty. The Student Record is in charge of the Independent Association. Both of these publications are issued twice a month.

TRAVELING EXPENSES.

The railways of the State are generously coöperating with the Regents of the University by giving reduced rates to students when traveling to and from their homes and the University. The Southern Pacific Company, the Virginia and Truckee, the Nevada Central and the Eureka and Palisade railways will sell tickets to students at one-half the usual local rate. To obtain the benefit of the half rates the student must accompany his application for a ticket with a certificate from the President of the University. These certificates may be obtained by writing to the "President of the State University, Reno, Nevada." Students coming to the University from points outside the State must pay full fare to the State line.

TEXT BOOKS.

All the text books used in the University may be purchased at the Registrar's office at a price which covers the actual cost of purchasing and keeping these books. No credit will be given purchasers of books.

LABORATORY FEES.

To maintain its large and valuable laboratories is a constant and heavy expense to the University. It is impossible for the Regents to provide material in these laboratories free of all expense to the students. For this reason the Regents have established a moderate charge for the use of the material actually used by the student, as follows:

For General Chemistry, per term	$2.00
For Course in Qualitative Chemistry	5.00
For Quantitative Chemistry, per term	2.50
For Agricultural Chemistry, per term	2.50
For Mineralogy, per term	2.50
For Junior Assaying, first term	5.00
For Junior Assaying, second term	7.50
For Senior Metallurgy, per term	10.00
For Biology or Bacteriology, per term	2.50
For Practical Mechanics, per term	2.50
For Typewriting, per term	1.00

DEPOSIT FOR BREAKAGE OR DAMAGE.

The following deposit fees will be required of students in the department to which the subject belongs, but will be returned at the end of the year to the student less the amount of breakage or damage of material given to the student. The general guarantee fund is applied to necessary incidental repairs about the grounds and buildings, and no part of this fee will be returned.

General Chemistry, per term	$2.00
Quantitative Chemistry, per term	5.00
Qualitative Chemistry, per term	5.00
Agricultural Chemistry, per term	5.00
General Guarantee Fund, per term	1.00

Students in the Department of Practical Mechanics will furnish their own locks for their lockers and bench drawers.

AIDS TO MORAL AND RELIGIOUS CULTURE.

A Young Men's Christian Association and a Young Women's Christian Association have been organized among the students of the University, for religious and social improvement.

The churches of the town of Reno are cordially thrown open to the students, whose interests are largely consulted by the pastors in their pulpit instruction and in their plans of work. There are churches of the following communions in the city, each with flourishing organizations directed to the spiritual and social life of young people: Roman Catholic, Episcopal, Methodist, Advent, Congregational, Baptist, Presbyterian, and Volunteers of America.

All the restrictions placed upon the students in their University life rest upon the basis of a sound ethical culture.

FACILITIES FOR PHYSICAL TRAINING.

The University is provided with an excellent gymnasium, and a physical director has charge of the department of physical training and hygiene for young women and young men.

SUPERVISION OF ATHLETICS.

A fine athletic field of six acres loaned to the University by Regent J. N. Evans has been set apart and equipped especially for open-air sports. The campus provides room for tennis courts, as well as for the military drill field. The policy of the University is to foster the spirit of honor and gentlemanliness in athletics, to suppress evil tendencies, and to see to it that athletic sports shall not encroach upon the claims of scholarship.

RULES GOVERNING STUDENTS PARTICIPATING IN ATHLETICS.

To represent Nevada State University in any public contest, a student must conform to the following rules:

SECTION I.

RULE 1. He must be an amateur.

RULE 2. If a candidate for a degree, he must attend regularly all the exercises of his class.

RULE 3. If a special student, he must give evidence of good faith regarding his intention to remain a full year in the University. He must also take courses amounting to not less than sixteen hours a week and attend regularly the exercises in such courses.

RULE 4. Like other students, he must maintain satisfactory standing in his class. A student who does not maintain a satisfactory standing in one school of the University cannot, by entering another, alter his status as regards these rules.

RULE 5. He must not receive any form of remuneration; that is, he must not receive any pecuniary benefit whatsoever from his connection with any athletic team.

RULE 6. He must pass a physical examination satisfactory to the Committee on Athletics.

SECTION II.

RULE 1. Schedules for all games must be submitted to the Committee on Athletic Sports and approved by them.

RULE 2. A similar approval is required in the case of every individual intending to represent Nevada State University in any single contest.

EXPENSES OF LIVING.

THE COTTAGE is the University home for young women. Mrs. N. W. Blume, a lady of large experience and wisdom, is Mistress of the Cottage, and gives all her time to the young women of this college home. In regard to ventilation, heating, light and the furnishing of the rooms, all the equipment and arrangements are of the very best kind for the health and comfort and culture of the occupants. Young ladies coming to the Cottage should provide themselves with the following articles:

Four white table napkins; 4 sheets, 2¼ yards, by 1½ yards; 4 pillow cases, 20 inches by 30 inches; 2 white bed spreads, same size as sheets; 1 pair of blankets; 1 comfort, same size as sheets; 1 comfort, extra thickness, 3 feet by 6, to put on mattress; 6 good towels; 2 aprons for work in shop and in laboratory; personal toilet articles, such as soap, sponges, comb, brushes. All articles of room equipment and personal wearing apparel should be plainly marked with the name of the person.

No special charge is made in the way of room rent to the young ladies.

LINCOLN HALL is the college home for young men. The fine building has accommodations for one hundred young men, and is equal to the best of modern college halls for young men. The head master of Lincoln Hall is Mr. Richard Brown. Young men coming to Lincoln Hall should provide themselves with the following articles:

Four white table napkins; 4 sheets, 2¼ yards by 1½ yards; 4 pillow slips, 20 by 30 inches; two white bed spreads, same size as sheets; 1 pair blankets; 1 comfort, same size as sheets; 1 comfort, extra thickness, 3 feet by 6, to put on mattress; 6 good towels; personal toilet articles, such as soap, sponges, comb, brushes. All articles of room equipment and personal wearing apparel should be plainly marked with the name of the person.

No special charge is made to the young men for room rent in Lincoln Hall.

TABLE BOARD—For the accommodation of the students, the President of the University has maintained for several years a dining hall in the basement story of the University building known as Stewart Hall. During the past summer the dining hall equipment and service has been reorganized with a view to securing board and table service of the most acceptable character. The price of table board for the coming year will be $16 a month, payable in advance. The following special concession is made with a view to the mutual advantage of the University and the students. If the board bill for the month is paid in advance, on or before the fifteenth day of the month, a rebate of $1 will be granted, which places the cost of table board per month at $15. If the board is not paid until after the fifteenth of the month an additional charge will be made of twenty-five cents a day until the account is settled. If the board bill is not paid by the last day of the month, the privileges of the dining-hall will be denied until the bill has been paid. *No deviation will be made from the above regulations.* After the expenses of the dining-hall have been fully met, any surplus is paid over to the Board of Regents to pay for service rendered in maintaining the Cottage and Lincoln Hall.

MILITARY SCIENCE AND TACTICS.

1. Appreciation of the advantages of military drill and training in the education of youth is now well-nigh universal. The regular out-of-door drill constitutes one of the best systems of physical training, while at the same time habits of obedience to lawful authority are instilled which assist materially in the development of good loyal citizens. A general knowledge of the system of national defense and of the organization of the Army and Navy and their relations to the civil power is considered essential to intelligent suffrage.

2. This department is in charge of an officer of the United States Army detailed by the War Department as Professor of Military Science and Tactics and who is also Commandant of Cadets.

INSTRUCTION.

3. Instruction in military subjects is both practical and theoretical, special prominence being given to the former. The practical instruction consists in: Infantry Drill, through

the school of the battalion in close and extended order. Advance and rear guards and outposts. Marches. The ceremony of battalion review, inspection, parades, guard mounting, and escort of the colors. Infantry target practice. Instruction in First Aid to the Injured. Arms and accouterments are furnished by the War Department, and with an ample drill ground and gymnasium the University is well equipped to carry on the practical work. The theoretical course consists in the study of: The Infantry Drill Regulations covered by the practical instruction. The Manual of Guard Duty. Small Arms Firing Regulations, Parts I, II and VII. The Articles of War and Company Records and Papers. In addition lectures are given on the following subjects: The organization of the United States Army, including volunteers and militia. Patrols and Outposts. Marches. Camps and Camp Hygiene. Lines and Bases of Operations. Attack and Defense of Advance and Rear Guards and Outposts, and Convoys. Special attention is given to military conditions as they exist in this country, the special object aimed at being to fit the graduate as far as may be for a commission in the militia, volunteers, or regular service. The names of the three cadets graduating highest in the Military Department are annually reported to the War Department.

ATTENDANCE.

4. All male students of the University, including those in the Preparatory, Commercial, and Special classes are required to receive instruction in this department. Those who are physically disqualified for drill may apply to the President to be excused from the practical course only. Every absence must be explained. An unauthorized absence is not only counted as an offense against discipline, but is marked 0. All absences whatever are subject to being made up by extra duty.

ORGANIZATION.

5. Students taking the practical course are designated cadets, and are organized into a battalion which is known as "The Battalion of Cadets of the Nevada State University." This battalion consists, for the present, of two companies and a band.

UNIFORM.

6. Cadets are required upon entrance to provide themselves with a uniform of prescribed design, consisting of coat, trousers, cap, white gloves, and black shoes, with appropriate insignia.

7. Cadets will wear the uniform during University hours when on the campus, except when engaged in laboratory or shop work, in labor about the buildings and grounds, or in authorized athletic games. Outside the University grounds uniform or civilian clothing may be worn, but the wearing of composite costume is prohibited, except that a civilian overcoat may be worn over the uniform when the weather demands. A cadet will not dispose of his uniform until he severs his connection with the University. Neatness in dress and appearance is at all times insisted upon.

CADET OFFICERS.

8. Cadet officers will receive commissions from the Governor of the State. These commissions will entitle the Governor to their services in case of insurrection or rebellion. Cadet officers will be ranked after graduation as retired officers of the University Cadets, unless they choose to resign at the time of their graduation. The non-commissioned officers are appointed by the President of the University upon the recommendation of the Commandant.

9. The officers and non-commissioned officers are selected from those cadets who have been most studious, soldier-like in the performance of their duties, and most exemplary in their general deportment. In general the officers are taken from the Senior class; the sergeants from the Junior class; and the corporals from the Sophomore class.

10. Cadet officers when on duty as such will report all breaches of discipline coming under their notice to the Commandant.

11. No cadet shall in any way attempt to call to personal account another cadet for having, while in the execution of his office, corrected or reported said cadet.

DISCIPLINE.

12. Discipline is that quality which insures prompt, unhesitating, intelligent obedience to legitimate orders. It is an habitual state of mind which is essential to self-control, to the efficiency, health and comfort of troops, and to the proper care of government property. In order to command, one must learn to obey.

13. Military authority will be exercised at all times with firmness, kindness and justice; and superiors are forbidden to injure those under their authority by tyrannical or capricious conduct or by abusive language.

14. Courtesy among military men is indispensable to discipline.

15. Punishments must conform to law and follow offenses as promply as justice will permit.

16. The punishments to which cadets are liable are:

(1) Reprimand, private, public, or in orders. Deprivation of privileges.
(2) Reduction to ranks of officers and non-commissioned officers. Suspension.
(3) Dismissal.

Punishments of the first class may be imposed by the Commandant; those of the second class by the Commandant with the approval of the President; those of the third class by the Committee on Student Affairs with the approval of the President.

17. The utmost care will be taken of the arms and other public property. Any cadet damaging same shall make good its value.

18. No cadet shall have in his possession at any time any kind of firearm or weapon other than that regularly used on duty.

19. All combinations against proper authority, under any pretext whatever, are strictly prohibited. All deliberations or discussions having the object of conveying praise or censure or any mark of approbation or disapproval toward superiors are prohibited. Applications for redress or grievances, if made by individuals in a proper manner, will always receive due attention.

20. In general, conduct prejudicial to good order and military discipline is prohibited.

MISCELLANEOUS.

SCHOLARSHIPS.

The friends of education, and particularly the friends of the University, are urged to consider the founding of scholarships. There are many unusually competent young men and young women in the State whose subsequent life would be made eminently useful to their generation by means of the discipline of a University course, but whose financial resources are inadequate to obtain it for them. This University is straining every nerve to provide for such cases, but its ability to do so is far less than the worthy demands made upon it. No means of perpetuating a helpful and elevating influence is at all comparable to that which provides a permanent fund, the proceeds of which shall be devoted to educating the young through the growing centuries.

WANTS OF THE UNIVERSITY.

The attention of the friends of higher education of the State of Nevada is respectfully called to the facts that the State University offers an opportunity for wise beneficence where the results will be large and early. It is a serious mistake not to regard the State University as a noble object for private benevolent endowment. Its work is the praise of those who are competent to pronounce upon its character, but yet its facilities must be greatly increased in order that it may fulfill its mission. Among its most pressing needs we mention the following:

1. Funds for the endowment of scholarships and fellowships.
2. An astronomical observatory.
3. A natural history building.
4. A library building.

GENERAL ASSEMBLY.

A general assembly of all the students of the University and all the members of the Faculty is held every Wednesday. This is the lecture service of the week, and is under the special direction of the President of the University. These weekly lectures are

given not only by the members of the Faculty, but also by men and women of special eminence in particular fields of study and travel and business enterprise.

AID TO STUDENTS.

It is the purpose of the officers of the University to aid meritorious students of limited means so far as it lies in their power. Almost all of the work in and about the University buildings and grounds is now done by students. The skill that the young men acquire in the carpenter and machine shop enables them to do most of the repairing and building required on the grounds. Young women are favored whenever possible with such work as typewriting, copying and housework. It is to be remembered that the power to favor students with self help is limited by circumstances, and *therefore students cannot expect to earn enough to pay all their expenses while pursuing their studies.*

ADMITTANCE, ATTENDANCE AND GRADUATION.

REGISTRATION.

At the beginning of each term each student must register in person at the Registrar's office. Students register for the work of the whole term, and no changes can be made except by permission of the Faculty. No credit will be allowed for work not registered, except by special permission of the Faculty; the required work of the student is based on the average of eighteen to twenty-two hours per week. On account of the numerous laboratory and workshop courses it is necessary to divide large classes into sections for recitations. Every hour for which credit is given is understood to represent approximately, for the average student, three hours of actual work through one term. Thus, in lecture or recitation work, one hour is alloted to the lecture or recitation, and from one and a half to two hours for preparation or subsequent reading by the student. In laboratory, shop and field work, two and one-half hours are required as an equivalent for one hour of class recitation or lecture work.

ATTENDANCE UPON RECITATIONS AND LECTURES.

The requirements for punctual and regular attendance upon all recitations, lectures and other prescribed college exercises are exact and firm. Professors may excuse students on account of necessary absence from their classes, if the reasons seem valid. All unexcused absences are reported to the President's office and may subject the student to admonition, suspension or dismission. Students who find it necessary to leave before the close of the year, and who expect to return, and students desiring to be absent for a period of time, should obtain leave of absence from the President.

CREDENTIALS.

Students intending to enter the University will confer a favor upon the authorities if they will bring a list of the studies completed in the last school attended, together with the grades in the same. A blank will be forwarded for this purpose upon application to the Registrar. Every candidate for admission will find it advantageous to furnish a testimonial from his teachers or employers as to character and efficiency. The President may require from each candidate satisfactory evidence of good moral character.

CONDITIONS OF ADMISSION.

The courses of study published in this register are courses which have been recently prepared by the Faculty of the University. The requirements for admission to these courses are considerably in advance of the requirements of preceding years. It is not deemed just to advance the standard of admission without giving students sufficient notice and time for preparation. For this reason the requirements given below are about the same as for the preceding year.

ADMISSION OF SPECIAL STUDENTS.

Persons who are not candidates for a degree, and who wish to pursue some one study and its related branches, may be admitted as special students without passing the usual entrance examination on the recommendation of the professor under whom the special studies are to be taken; but the professor concerned may impose any test by examination or otherwise that he may deem advisable. Special students are admitted to work only in the University courses. A failure on the part of any special student to maintain a good standing in the special studies to which he is admitted will at once sever his connection with the University.

ADMISSION TO ADVANCED STANDING.

Students from other institutions of recognized collegiate rank who present letters of honorable dismissal may be admitted to such standing and upon such terms as the Faculty may deem equitable. Every such candidate is required to present along with a catalogue of the institution in which he has studied a full statement, duly certified, of the studies he has completed, including studies passed at entrance.

DEGREES.

1. The Degree of Bachelor of Arts (B.A.) will be granted to those who have completed in a satisfactory manner the equivalent of four years work, and who have satisfied the requirements set forth in the course in Liberal Arts.

2. The Degree of Bachelor of Science (B.S.) will be granted to those who complete satisfactorily any one of the regular courses of study in the Department of Applied Science, viz: the course in Mining or in Agriculture or in Mechanics or in Civil Engineering, or in the School of General Science.

3. Previous to the conferring of the degree the candidate must prepare and submit a satisfactory thesis upon some special or technical subject selected by him with the approval of the professor in charge of the department in which he desires to graduate.

4. The Degree of Master of Arts will be conferred upon graduates from the School of Liberal Arts who shall pursue a prescribed course of study for one year after receiving the degree of B.A. and shall present a satisfactory thesis.

5. The Degree of Master of Science will be conferred upon graduates from the course in Mining or in Agriculture or in Mechanics or in Civil Engineering who shall pursue a prescribed course of study for one year after receiving the degree of B.S. and shall present a satisfactory thesis.

6. The Engineering degrees, viz: Mining Engineer, Mechanical Engineer and Civil Engineer, will be conferred upon graduates in those departments who pursue their technical studies one year more or have been engaged in professional work in positions of responsibility for three years. In either case a further thesis on an entirely original technical topic, or a detailed account or report of the professional work engaged upon, must be presented for acceptance at least thirty days prior to the date of conferring the degree.

THESES REQUIREMENTS.

A satisfactory thesis, prepared in accordance with the following rules, must be presented by each Senior as an essential condition for receiving a degree from any school of the University, or a diploma from the State Normal School.

The thesis is intended to give the student an opportunity to make a comparatively independent effort in some chosen field while still under the guidance of some department, and to test his ability for such independent work in a way that cannot well be done in connection with ordinary class work.

It is expected, therefore, that such thesis will show the following characters, and its merits will be determined upon these points: Originality (comparative) and individual effort; scientific or literary knowledge; careful preparation; good arrangement and presentation of subject; correct English, punctuation and form.

In order to insure time for satisfactory preparation, the student is advised to select the subject as early as possible. All subjects must be selected, accepted by some department, under whose direction the thesis is to be written, and both subject and department reported to the Committee on Theses *not later* than the first Monday in November.

It is expected that thesis work shall continue throughout a large portion of the Senior year and not be relegated to the last few weeks of the last term; and a definite portion of each week should be set aside for such work.

From time to time reports of progress, notes, references, etc., should be presented to the Professor in charge as he directs. Having once registered in a certain department for thesis work, the student is subject to all rules made by that department for such work, and any deficiency in this work will be reported during the term as in the case of class work.

Each department may set a date for the completion of theses under its supervision, but *all theses* should be completed and presented to the Committee on Theses on or before the first day of the final examinations in May.

In final form, the thesis should be prepared upon the officially designated paper and bound in the officially designated cover. All maps and drawings or other illustrations should be so arranged that they can be bound within the same cover. It is required that the thesis be typewritten, as this is not only neater, but three or more copies may be made at one time.

The title page should read:

(Title of Thesis.)
A Thesis
Presented as part requirement for the
(Normal Diploma or Degree of....., in.....)
by (Name of Writer).
Nevada State University.
(Date.)

This may all be typewritten.

On reverse of title page should appear:

Respectfully submitted by
(Name in Autograph)
Candidate for (Normal Diploma or.....degree).
Approved: (Name of Professor in Charge in Autograph. Title of Professor in Charge).
Accepted by Thesis Committee: (Name of representative or Chairman).

Any thesis not prepared according to the rules and regulations of a regularly assigned department, or not approved by the head of such department, will not be accepted for any degree or diploma.

The thesis must be written in some department in which the student is pursuing or has pursued advanced work, or which is distinctly connected with the life work his course indicates he has taken.

A certain day is set aside during Commencement week for the public reading of theses. Each student will be allowed not more than twenty minutes for reading, and this will necessitate frequently the cutting out or abstracting of certain parts. The Professor in charge should be consulted as to the parts most desirable to omit or condense for such reading.

Any student who finds that he cannot be present on Thesis Day, on account of sickness or other good excuse, is under obligation to secure some one to read his thesis—preferably some classmate or instructor—and to report the fact to the Committee before the time of such reading.

It is understood that if any prizes or other awards be made for the most successful thesis under any given conditions of judgment, that only those theses that are presented on Thesis Day may be candidates for such awards.

The final copy, approved by the Professor in charge, and accepted by the Committee on Theses, becomes the property of the University, and is filed for record and reference.

ADMISSION OF STUDENTS.

I. BY CERTIFICATE.

1. The accrediting committee will determine in each case, on presentation of certificate or other evidence, whether the work done by the applicant meets the entrance requirements.

Note: As a way of ascertaining how the different schools and teachers in the State shall be accredited, information blanks will be sent out in January of each year to the principals and teachers of our schools. These blanks will ask for:

(1) Grade of school.
(2) Year in the course.
(3) Subjects studied.
(4) Time given to each in hours and weeks.
(5) Methods and apparatus.
(6) Name of student with grades.

2. Graduates of grammar grades may be admitted to the Junior year of the high school upon the certificate and recommendation of their former teachers. If any subject of high school grade has been studied it may be accredited in accordance with the provisions of article I.

3. Any applicant holding a teacher's certificate may offer such certificate in lieu of examinations in so far as the subjects included in said certificate shall be deemed equivalent to the University requirements.

II. BY EXAMINATION.

1. All students entering the University must pass an examination in English composition. (See suggestions to teachers and students, page 31 of the Register.)

2. Applicants from non-accredited schools and teachers, claiming to have studied certain subjects, must pass an examination in these subjects. The University examiners will determine in each case whether the subjects offered are equivalent to those required by the University.

PROMOTION BY EXAMINATION.

1. All students shall be required to pass an examination at the end of each semester (Seniors included); this examination to cover the work of the semester.

Note: By examination is understood an ordinary examination or some equivalent exercise.

2. Students shall be graded by letters and by per cent:

a denotes 90 to 100 per cent.
b denotes 80 to 90 per cent.
c denotes 70 to 80 per cent.
d denotes 50 to 70 per cent; conditional failure.
e denotes complete failure.

Final grades shall be reported to the Registrar by per cent.

3. Each teacher is required each month to record in his classbook the grade of each student for that month, said standing to be based upon the *personal estimate* of the teacher or upon *oral or written examination* according to the discretion of the teacher; such marks to be made known to students by the letters *a*, *b*, *c*, *d* and *e*.

4. The average of the various markings during the semester shall constitute one-half of the final grade for the semester. The final examination shall also constitute one-half.

5. Students receiving *d* for any month shall receive warning from the instructor; students receiving *e* shall be reported to the President.

6. Students absent from any cause whatever one-fifth of the time during any semester must pass an extra examination in addition to the regular final examination. This extra examination helps to complete the term standing, but does not abolish it.

7. Students will be expected to register, begin recitations and take all examinations according to the University calendar and schedules, and in all cases attendance will be reckoned from the date instruction begins.

TERM CONDITIONS.

1. Any student having a final standing of *d* in any subject is conditioned in that subject for the semester. This condition must be removed at the beginning of the following semester.

A student having a final standing of *e* in any subject has made a complete failure and must take the subject over in class.

The term standing will be reckoned one-half in all cases of reëxamination.

2. A student having conditions of more than two-fifths of the number of hours required by the course to which he is accredited in any semester will not be permitted to register the following semester.

This rule does not apply to entrance conditions.

ENTRANCE CONDITIONS.

3. A student may be admitted to the Freshman Class or to the First Year Normal with an entrance condition of not more than ten credits; but this entrance condition must be removed within one year from date of admission.

HOURS REQUIRED.

4. No student may take in any semester more hours than belong to the course to which he is accredited, without special action of the Committee on Classification. No

student may take fewer than four-fifths of the number of hours required by his course without permission of the Committee on Classification.

Students wishing to take special work in the University for which they may be prepared will be governed as to the subjects and hours by the judgment of the Committee on Classification.

REQUIREMENTS FOR ADMISSION TO THE FRESHMAN CLASSES.

Applicants for admission to the Freshman Class in any of the College Courses must be at least fifteen years of age; must give satisfactory references from their last instructor concerning moral character; and must, by examination or by certificate, give evidence of proficiency in such of the subjects as are designated below for the course and status sought.

I. ADMISSION ON EXAMINATION.

The Times and Places of Examination.—The University will conduct examinations May 26–28, 1903, in any town or at any school where the number of candidates and the distance from other places of examination may warrant it. Application for this purpose should be sent to the President of the University not later than May 1, 1903.

SUBJECTS FOR ADMISSION TO THE UNIVERSITY SCHOOLS.

All the subjects in Group I—namely, English, Mathematics, History, Latin, Science and Art—are required for admission to the Freshman Class, but certain subjects—French, German, Spanish or Science—may be offered in place of Latin. Subjects in Group II required for admission to First Year Normal.

To be of real value to the pupil and to serve as a true preparation for college work, the preparatory subjects must be pursued in the proper sequence, in accordance with the best methods, and with persistence and vigor; the aim should be to concentrate the time and energy upon the few most essential subjects and to prepare these thoroughly. It is only thus that a foundation sufficiently broad and firm can be laid for successful future work. Hence, consecutive work, in any given subject, and frequent weekly recitations, are matters of prime importance.

LIST OF ENTRANCE SUBJECTS.

SUBJECTS.	GROUP I. 60 units required for admission to Freshman Class College of Arts and Science and Normal Colleges.	GROUP II. 40 units required for admission to First Year Normal.
1. English (15 units):		
a. Literature	10 units	10 units
b. Composition	5 units	5 units
c. Spelling		
d. Grammar		
2. Mathematics (15 units):		
a. Arithmetic	5 units	5 units
b. Algebra	5 units	5 units
c. Plane Geometry	5 units	
3. History (15 units):		
a. Of the United States and Civics	5 units	
4. Latin (15 units):		
a. First Year	5 units	5 units
b. Second Year	5 units	5 units
c. Third Year	5 units	
5. Science:		
a. Physics	5 units	
b. Bookkeeping	2½ units	2½ units
6. Art:		
Freehand Drawing	2½ units	2½ units

SUBSTITUTIONS.

For admission to any of the Science courses, an equivalent number of units from the following subjects may be offered in place of Latin:

1. French (15 units):
 - *a.* First Year 5 units
 - *b.* Second Year 5 units
 - *c.* Third Year 5 units
2. German (15 units):
 - *a.* First Year 5 units
 - *b.* Second Year 5 units
 - *c.* Third Year 5 units
3. Science (15 units):
 - *a.* Physical Geography 5 units
 - *b.* Botany 5 units
 - *c.* Physiology 5 units
 - *d.* Chemistry 5 units
 - *e.* Zoölogy 5 units
4. History (15 units):
 - *a.* English History 5 units
 - *b.* Ancient History 5 units
 - *c.* Economics 5 units

SUGGESTIONS TO TEACHERS AND STUDENTS.

1. ENGLISH.

a. Grammar—One of the common school text books on English Grammar should be thoroughly mastered. Special attention should be given to oral analysis and to parsing. (Omit False Syntax.) Swinton's New English Grammar or Reed and Kellogg's Higher Lessons in English indicates the character and amount of work required.

b. Composition—The applicant will be tested as to his ability to write correct English. Each applicant will be required to write an essay of not less than four pages of foolscap. The subject may be taken from the literature studied or from the applicant's observation and experience. The essay must be correct in form and be neatly written; it must be correct in grammar, spelling, use of capitals, and punctuation. As a rule, the sentences should be short. Redundant expressions and diffuseness of style should be avoided. The words must be selected with care. The essay, as a whole, must be logically arranged and readable. For rules and terminology, see Genung's Outlines of Rhetoric or Hill's Foundations of Rhetoric.

c. Spelling, penmanship, the use of capitals and punctuation will be tested in the essay required above. Poor work in any of these subjects will cause the essay to be rejected.

d. Oral Reading—The applicant will be required to read aloud at sight ordinary prose and poetry. The words must be pronounced correctly; the pieces must be read with the proper emphasis and modulation of voice.

e. Literature—The requirement in English Literature presupposes a study of the works prescribed in the High School course of study. The examination will be based upon the works studied in the High School and will cover the following general topics:

(1) The analysis of the pieces read.

(2) The explanation of the historical, geographical and mythical allusions contained in the pieces read.

(3) The explanation of all ordinary grammatical and rhetorical questions (construction of words, figures of speech, prosody, etc.)

(4) The description of the characters of the pieces, both as to their motives and as to their outward appearance.

(5) Some facts concerning the life and times of the authors read.

2. MATHEMATICS.

a. Arithmetic—The essentials of Arithmetic as given in Walsh's Higher Arithmetic or an equivalent text-book. Applicant should have a thorough knowledge of the principles

underlying arithmetical processes, especial attention being given to the analytical treatment of problems, and to quick and accurate mental computations.

b. Algebra—A good knowledge of the fundamental operations—the various methods of factoring, highest common factor, lowest common multiple, theory of fractional and negative exponents, radicals including rationalization, equations of the first and second degree, in one or more variables, quadratic equations, the formation of equations with given roots, rates, proportion, arithmetical and geometrical progression—is required. A satisfactory treatment of the topics in Algebra may be found in such text-books as Wells's Academic Algebra, Wentworth's New School Algebra, or Bowser's Academic Algebra.

c. Plane Geometry—A thorough knowledge of the subject as given in such texts as Beaman & Smith's Plane Geometry, Wentworth's New Plane Geometry, or an equivalent text-book. The pupil should be taught to see the truth of the existing relations in problems by the sense seeing as well as reasoning. To this end, great importance is placed upon neat and accurate construction. The test of the applicant's knowledge of the subject is his ability to apply principles in the solution of original problems.

3. HISTORY AND ECONOMICS.

a. American History and Civics—5 credits.

b. English History—5 credits.

c. Ancient History—5 credits.

d. Economics—5 credits.

Note: General requirement for all courses: All candidates who offer History for entrance must submit history note-books as a part of the examination test. This requirement will be imposed on students entering on certificate as well as those who take examinations. These note-books should contain:

(1) The notes made by the pupil in the class room.

(2) Syllabi, reading notes, analyses, abstracts, summaries, etc.

(3) Special investigations, including the original notes and the finished thesis.

(4) Historical maps made by the pupil.

(5) Examination papers.

The Department of History at the University will, upon application, give printed suggestions with regard to methods of work and desirable additional reading.

4. LATIN.

a. Grammar—A thorough preparation in the elements of Etymology and Syntax, as found in Collar and Daniell's First Latin Book and Bennett's Latin Grammar.

b. Prose Composition—Ability to translate into Latin a selected passage of English narrative based upon one of the texts read.

c. Reading—Collar's New Gradatim; fifteen exercises in Viri Romæ or a corresponding amount in Nepos; four orations of Cicero. In place of two orations of Cicero may be substituted two books of Cæsar's Gallic War; four books Vergil's Æneid. The University, however, desires not so much to fix the amount of Latin to be read as to urge thorough preparation in the reading and writing of Latin of moderate difficulty. Three years of daily recitation should be given to the preparatory work in Latin.

The applicant for admission should be able to pronounce Latin words readily and accurately. The Roman method of pronunciation is used at the University.

d. Roman History—In addition to the above preparation will be required a knowledge of Roman history as far as the reign of Augustus.

5. FRENCH.

a. A thorough knowledge of the principles of Grammar. This involves an accurate understanding: (1) Of the inflections and conjugation; (2) of the elements of Syntax, especially the various uses of the article, the pronoun, the partitive constructions, the agreement of participles, and the subjunctives.

b. A careful study of the more common idioms.

c. Facility in translating simple English into French and moderately easy French into English.

d. Fluency and correctness in pronouncing French.

The following texts are recommended for use: Chardenal's Complete French Course; Super's French Reader, Parts I and II; Whitney's French Grammar, Part I; Enault's *Le Chien du Capitaine;* Labiche's *Le Voyage de M. Perrichou;* Halévy's *L'Abbé Constantin;* Mérimée's *Colomba.*

6. GERMAN.

a. A mastery of the elements of grammar, including the declensions, conjugations, special uses of the cases, word-order, the force of prefixes and suffixes, and the uses of the subjunctive.

b. Facility in translating easy English into German, and moderately simple German into English at sight.

c. Ability to pronounce German correctly and fluently.

The following texts, or their equivalents, will provide the necessary preparation: Collar's Eysenbach; Van Daell's German Reader; Baumbach's Waldnovellen; Schiller's Die Jungfrau von Orleans and Maria Stuart; Harris' Prose Composition, the first 26 exercises.

7. SCIENCE.

a. Physiology—The anatomy, histology, and physiology of the human body and the essentials of hygiene, taught with the aid of charts, to the extent given in Martin's Human Body (Briefer Course) or an equivalent text-book.

b. Physical Geography—The leading physical facts in their relations as given in Tarr's First Book of Physical Geography.

c. Chemistry—The elements of Chemistry as given in such text-books as Shepard's Elements of Chemistry, or the equivalent. Laboratory practice is essential.

d. Botany—Any course will be satisfactory which brings the pupil directly into contact with plants, especially in their natural surrounding out of doors. Gray's Structural Botany, together with a manual for the determination of the plants in the local flora, should be used in connection with the laboratory and out-of-door work.

e. Physics—The elements of Physical Science as presented in such text-books as Gage's Elements of Physics, or equivalent texts, with practical work in the laboratory by the student, or by the instructor in the presence of the class, and the calculation of problems arising in the work.

UNIVERSITY COLLEGES AND SCHOOLS.

I. THE COLLEGE OF AGRICULTURE.

1. The School of Agriculture.
2. The School of Domestic Arts and Science.
3. The Short Course in Agriculture.
4. The Short Course in Dairying.
5. The Short Course in Domestic Science.

The College of Agriculture comprises two Schools and three Short Courses, as follows:

(1) The School of Agriculture, leading to the degree of Bachelor of Science.

(2) The School of Domestic Arts and Science, leading to the degree of Bachelor of Domestic Science.

(3) The Short Courses in Agriculture, in Dairying and in Domestic Arts and Science will be given in January, February and March of each year. No examinations are required of those taking the "Short Courses."

The courses in Agriculture and Domestic Science present to the student such subjects as will provide him with a liberal industrial education. Text and practical work go hand in hand throughout the course of four years. The number of text studies carried by the student at any one time is small, in order that he may in no way be disqualified to carry on the practical work prescribed. By this, provision is made also for advanced students to do special work in such lines as they may choose. The various University departments are well equipped to meet the demands peculiar to this school. The Agricultural Experiment Station, with its farm in actual operation, adds much to this school, as here the student is permitted to observe and possibly take part in scientific investigation. The sciences that are necessary to a thorough knowledge of the underlying principles of agriculture and horticulture are fully treated.

THE SCHOOL OF AGRICULTURE.

FRESHMAN YEAR.

First Semester.	*Credits.*
English—Literature (2) and Composition (1a); *three hours*	3
German—Elementary German (1); *four hours*	4
Mathematics—College Algebra (1); *five hours*	5
Chemistry—General Chemistry (1); *three hours, one period*	4
Mechanics—Carpentry and Joinery (1); *two hours*	2
Drawing—Freehand Drawing (3); *five hours*	2
Military—Tactics; *one hour.* Drill; *three hours*	1
Second Semester.	
English—Literature (2) and Composition (1); *three hours*	3
German—Elementary German (1); *four hours*	4
Mathematics—Solid Geometry (2) and Plane Trigonometry (2); *five hours*	5
Chemistry—General Chemistry (1); *three hours.* Qualitative Analysis (3); *three periods*	6
Mechanics—Carpentry and Joinery (1); *two hours*	2
Drawing—Mechanical Drawing (3); *five hours*	2
Military—Tactics; *one hour.* Drill; *three hours*	1

SOPHOMORE YEAR.

First Semester.	
German—Schiller's Jungfrau von Orleans and Prose Composition (2); *four hours*	4
Mathematics—Spherical Trigonometry (3); and Plane Analytical Geometry (3); *five hours*	5
Zoölogy—General Zoölogy (1); *two hours, two periods*	4
Physiology—Physiology and Hygiene (5); *four hours*	4
Physics—Laboratory Physics (1); *two periods*	2
Mechanics—Shop Work (2); *two periods*	2
Drawing—Advanced Freehand Drawing (5); *five hours*	2
Military—Tactics; *one hour.* Drill; *three hours*	1
Second Semester.	
German—Schiller's Wilhelm Tell and Maria Stuart (2); *four hours*	4
Botany—General Botany (1); *two hours, two periods*	4
Chemistry—Quantitative Chemistry (4); *three periods*	3
Physics—Laboratory Physics (1); *two periods*	2
Mechanics—Shop Work (2); *two periods*	2
Horticulture—Plant Culture, Pomology (7); *five hours*	5
Military—Tactics; *one hour.* Drill; *three hours*	1

THE SHORT COURSE IN AGRICULTURE.

This course will be offered during the months of January, February and March each year. It is designed for the practical benefit of farmers and ranchers. No examinations, no fees.

THE SCHOOL OF AGRICULTURE.

JUNIOR YEAR.

First Semester. *Credits.*

English—English Composition, six themes (1b); *one hour* 1
Agriculture—Soils and Farm Crops (1); *five hours* 5
Engineering—Surveying (1); Class, *three hours;* Field, *two periods* 5
Chemistry—Agricultural Chemistry (5); *two hours, two periods* 4
Geology—Dynamic and Structural Geology (2); *three hours* 3
Political Science—Municipal Law and Ethics (1); *three hours* 3
Military—Tactics; *one hour.* Drill; *three hours* 1

Second Semester.

English—English Composition, six themes (1b); *one hour* 1
Agriculture—Plant Production, Fertilizer, Stock Feeding and Farm Economics (1); *five hours* 5
Engineering—Irrigation Engineering (1); Class, *two hours;* Field, *one period* 3
Chemistry—Agricultural Chemistry (5); *two hours, two periods* 4
Botany—Economic Botany (8); *two hours, two periods* 4
Political Science—International Law and Ethics (2); *three hours* 3
Military—Tactics; *one hour.* Drill; *three hours* 1

SENIOR YEAR.

First Semester.

English—English Composition, three forensics (1c); *one hour* 1
Agriculture—Breeds of Live Stock, Principles of Breeding (2); *five hours* 5
Forestry—Forest Supply (3); *three hours* 3
Anatomy—Comparative Anatomy (2); *two hours, two periods* 4
Veterinary Science—Diseases of Animals and their Remedies (4); *five hours* 5
Political Science—Elements of Economics; *three hours* 3
Military—Tactics; *one hour.* Drill; *three hours* 1

Second Semester.

English—English Composition, three forensics (1c); *one hour* 1
Agriculture—Stock Breeding and Stock Feeding (2); *five hours* 5
Anatomy—Comparative Anatomy (2); *two hours, two periods* 4
Dairying—Dairying (6); *two hours, one period* 3
Bacteriology—Lectures and Laboratory Work (6); *two hours, one period* 3
Entomology—Anatomy, Transformations and Classification of Insects (1); *three hours* 3
Political Science—Political Economy (4); *three hours* 3
Military—Tactics; *one hour.* Drill; *three hours* 1

THE SHORT COURSE IN DAIRYING.

This course will be offered during the months of January, February and March, each year, in connection with the Short Course in Agriculture. It is given for the practical benefit of farmers and ranchers. No examinations, no fees.

THE SCHOOL OF DOMESTIC ARTS AND SCIENCE.

The course of study in the Department of Domestic Arts and Science covers a period of four years. Young women who have completed the subjects required in the public schools of Nevada below the High School may be admitted to the First Year of this course either by certificate or by examination.

FIRST YEAR.

First Semester.	*Credits.*
English—English Literature; *three hours*	3
English—English Grammar; *four hours*	4
English—Composition and Spelling; *one hour*	1
Mathematics—Arithmetic, including Metric System, *three hours.* Algebra, *two hours*	5
Sewing—Sampler Work; Various stitches used in Hand-sewing; Mending; Use of Sewing Machine; Draughting and Making of Undergarments (1); *two periods*	2
Cookery—Care of kitchen, china, glass, etc.; Food Values; Preparation and Composition of Simple Foods, eggs, cheese, soups, meats, vegetables, sauces, batters, doughs (5); *two periods*	2
Bookkeeping—Elements of Bookkeeping (1); *three hours*	3
Hygiene—Physical Training for Women; *three hours*	1
Second Semester.	
English—English Literature; *three hours*	3
English—English Grammar; *four hours*	4
English—Composition and Spelling; *one hour*	1
Mathematics—Arithmetic, including Metric System; *three hours;* Algebra, *two hours*	5
Sewing—Advanced Hand and Machine Sewing; Fitting and making of shirt-waists and cotton dresses; Making of children's dresses; Draughting of patterns from measure (1); *two periods*	2
Cookery—Food Values; Marketing, cuts of meats, etc.; Composition and preparation of more elaborate dishes, frying, roasting, broiling, entrées, salads, sauces, desserts, frozen creams, ices, sherbets (5); *two periods*	2
Bookkeeping—Elements of Bookkeeping (1); *three hours*	3
Hygiene—Physical Training for Women; *three hours*	1

SECOND YEAR.

First Semester.	
English—English Literature; *three hours*	3
English—Composition and Spelling; *one hour*	1
Mathematics—Elementary Algebra; *five hours*	5
Chemistry—General Chemistry (8a); *two hours, one period*	3
Sewing—Draughting of skirts and waists from chart; Fitting and making of dress from woolen materials (2); *two periods*	2
Cookery—Dining-room and its appointments; Serving of meals; Composition and preparation of more elaborate dishes, fancy cakes, soufflés, frostings and sauces, pastries, puff paste, salads and salad dressings (6); *two periods*	2
Drawing—Freehand Drawing (3); *five hours*	5
Hygiene—Physical Training for Women; *three hours*	1
Second Semester.	
English—English Literature; *three hours*	5
English—Composition and Spelling; *one hour*	1
Mathematics—Elementary Algebra; *five hours*	5
Chemistry—General Chemistry (8a); *two hours, one period*	3
Sewing—Matching of plaids and stripes; Elementary Millinery, including facings, etc., bow-making, etc. (2); *two periods*	2
Cookery—Invalid dishes (6); *two periods*	2
Drawing—Freehand Drawing (3); *five hours*	5
Hygiene—Physical Training for Women; *three hours*	1

THE SCHOOL OF DOMESTIC ARTS AND SCIENCE.

The aim of the course is to give cultural as well as technical training. The English language and literature have a place in each year. Arithmetic and algebra are studied through two years. The French language is pursued during the third and fourth years. Chemistry, physiology and bacteriology represent the sciences closely related to the household subjects, while history and art and drawing touch upon social interest.

THIRD YEAR.

First Semester.	*Credits.*
English—English Literature; *three hours*	3
English—Composition and Spelling; *one hour*	1
French—Elementary French (6); *four hours*	4
Chemistry—Applied Chemistry (8b); *two hours, one period*	3
History—United States History and Civics; *five hours*	5
Sewing—Draughting and Making of Fancy Waist; Millinery—Covering of Buckram Frames and Tam Crowns; Lectures on Outline and Color (3); *two periods*	2
Cookery—Preserving and Canning; Candy-Making; Advanced Cookery (7); *two periods*	2
Second Semester.	
English—English Literature; *three hours*	3
English—Composition and Spelling; *one hour*	1
French—Elementary French (6); *four hours*	4
Chemistry—Applied Chemistry (8b); *two hours, one period*	3
History—United States History and Civics; *five hours*	5
Sewing—Renovating; Practice in Designing; Study of Artistic Principles; Use of Practice Materials in Making Dress Trimmings and Finishings; Millinery—Shirred Hats; Wire-frame Making; Making of Buckram Frames, etc. (3); *two periods*	2
Cookery—Chafing Dish Course; Practice Work in General Cookery; Advanced Cookery (7); *two periods*	2

SENIOR YEAR.

First Semester.	
English—Literature (2) and Composition (1a); *three hours*	3
Dietetics—Practical Dietaries for Housekeepers (8c); *two hours*	2
Physiology—Physiology and Hygiene (5); *four hours*	4
Household Economics—Home Sanitation; Cost of Living (9); *one hour*	1
Cookery—Planning and cooking a simple meal according to approved dietetic standards; Fancy cookery; Serving of luncheon (8); *two periods*	2
Art—History of Art (5); *one hour*	1
French—Modern Prose and Prose Composition (7); *four hours*	4
Bacteriology—Lectures and Laboratory (6); *two hours, one period*	3
Second Semester.	
English—Literature (2) and Composition (1a); *three hours*	3
Dietetics—Practical Dietaries for Housekeepers (8c); *two hours*	2
Household Economics—Home Sanitation; Cost of Living (9); *one hour*	1
Sewing—Tailoring; Millinery—Advanced Millinery (4); *two periods*	2
Art—History of Art (5); *one hour*	1
French—Modern Prose and Composition (7); *four hours*	4
Dairying—Butter and Cheese-making; *three hours, two periods*	5
Thesis—Thesis; *two hours*	2

II. THE COLLEGE OF ARTS AND SCIENCE.

The College of Arts and Science comprises two Schools, as follows:

(1) The School of Liberal Arts, leading to the Degree of Bachelor of Arts.

(2) The School of General Science, leading to the Degree of Bachelor of Science. Both of these Schools give considerable freedom as to choice of subjects in the Junior and Senior years.

THE SCHOOL OF LIBERAL ARTS.

FRESHMAN YEAR.

First Semester.	*Credits.*
English—Literature (2) and Composition (1a); *three hours*	3
Latin—Vergil's Æneid (7); Mythology (1); *five hours*	5
Mathematics—College Algebra (1); *five hours*	5
History—Mediæval History (1); *three hours*	3
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (1); *three hours*	1
Elective—Beginning Greek (1), French (6), or German (1); *four hours*	4
Second Semester.	
English—Literature (2) and Composition (1a); *three hours*	3
Latin—Vergil's Æneid (7); *five hours*	5
Mathematics—Solid Geometry; *three hours.* Plane Trigonometry (2); *two hours*	5
History—Mediæval History (1); *three hours*	1
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (1); *three hours*	1
Elective—Beginning Greek (1), French (6), or German (1); *four hours*	4

SOPHOMORE YEAR.

First Semester.	
English—English Literature (3); *three hours*	3
Latin—Cicero's de Senectute, Prose Composition, Sight Reading (3); *three hours*	3
Chemistry—General Chemistry (1); *two hours, one period*	3
History—European History (2); *three hours*	3
Physics—Laboratory Physics (1); *two periods*	2
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (1); *three hours*	1
Elective—Greek: Homer's Iliad or Odyssey, Prose Composition (2); French: Modern Prose and Prose Composition (7); German: Jungfrau von Orleans (2) and Prose Composition (2); *four hours*	4
Second Semester.	
English—English Literature (3); *three hours*	3
Latin—Plautus and Terence, Roman Literature (5 and 6); *three hours*	3
Chemistry—General Chemistry (1); *two hours, one period*	3
History—European History (2); *three hours*	3
Physics—Laboratory Physics (1); *two periods*	2
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (1); *three hours*	1
Elective—Greek: Homer's Iliad or Odyssey, Prose Composition (2); French: Modern Prose and Prose Composition (7); German: Schiller's Wilhelm Tell and Maria Stuart (2); *four hours*	4

THE SCHOOL OF LIBERAL ARTS.

The course in Liberal Arts is designed to give students the general knowledge, culture and discipline which will make them intelligent citizens and members of society. It is not a professional course, and is not intended to take the place of such a course. The branches herein offered are universally regarded as the basis of a liberal education, and have long been studied as the best means of mental discipline and general culture. The course is almost as extensive and complete as the corresponding course given in the best colleges, and by means of a liberal system of electives offers students a considerable range of choice in the course of study.

In the Junior and Senior years each student is required to elect at least six hours advanced work in subjects pursued in Freshman and Sophomore years.

JUNIOR YEAR.

First Semester.	*Credits.*
English—English Composition, six themes (1b); *one hour*	1
Political Science—Municipal Law and Ethics; *three hours*	3
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (1); *three hours*	1
Electives—From subjects offered in any school, but with approval of Faculty Committee; *fourteen hours minimum*	14

Second Semester.	
English—English Composition, six themes (1b); *one hour*	1
Political Science—International Law and Ethics; *three hours*	3
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (1); *three hours*	1
Electives—From subjects offered in any school, but with approval of Faculty Committee; *fourteen hours minimum*	14

SENIOR YEAR.

First Semester.	
English—English Composition, three forensics (1c); *one hour*	1
Economics—Principles of Economics; *three hours*	3
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (1); *three hours*	1
Electives—From subjects offered in any school, but with approval of Faculty Committee; *fourteen hours minimum*	14

Second Semester.	
English—English Composition, three forensics (1c); *one hour*	1
Economics—Political Economy (4); *three hours*	3
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (1); *three hours*	1
Electives—From subjects offered in any school, but with approval of Faculty Committee; *fourteen hours minimum*	14

THE SCHOOL OF GENERAL SCIENCE.

The School of General Science differs from the School of Liberal Arts, as its name indicates, in the prominence given to subjects in pure science: Algebra, Geometry, Trigonometry, and Calculus. Chemistry, Zoölogy, Botany, Physiology and Physics hold the first place in the Freshman and Sophomore years. English, German and Hygiene also receive a due share of time.

FRESHMAN YEAR.

First Semester.	*Credits.*
English—Literature (2) and Composition (1a); *three hours*	3
German—Elementary German (1); *four hours*	4
Mathematics—College Algebra (1); *five hours*	5
Chemistry—General Chemistry (1); *three hours, one period*	4
Zoölogy—General Zoölogy (1); *four hours*	4
Drawing—Freehand Drawing; *five hours*	2
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (1); *three hours*	1
Second Semester.	
English—Literature (2) and Composition (1a); *three hours*	3
German—Elementary German (1); *four hours*	4
Mathematics—Solid Geometry; *three hours*, and Plane Trigonometry (2); *two hours*	5
Chemistry—General Chemistry (1); *three hours, one period*	4
Botany—General Botany (1); *four hours*	4
Drawing—Mechanical Drawing; *five hours*	2
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women; *three hours*	1

SOPHOMORE YEAR.

First Semester.	
English—English Literature (3); *three hours*	3
German—Schiller's Jungfrau von Orleans and Prose Composition (2); *four hours*	4
Mathematics—Spherical Trigonometry and Plane Analytical Geometry (2); *five hours*	5
Physiology—Physiology and Hygiene (5); *four hours*	4
Physics—Laboratory Physics (1); *two periods*	2
Drawing—Advanced Freehand; *five hours*	2
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (1); *three hours*	1
Second Semester.	
English—English Literature (3); *three hours*	3
German—Schiller's Wilhelm Tell and Maria Stuart (2); *four hours*	4
Mathematics—Solid Analytical Geometry and Differential Calculus (4); *five hours*	5
Botany—Systematic and Structural Botany (2); *four hours*	4
Physics—Laboratory Physics (1); *two periods*	2
Drawing—Descriptive Geometry; *three hours*	3
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (1); *three hours*	1

NOTE: *When German is offered for entrance credit, French will be taken.*

THE SCHOOL OF GENERAL SCIENCE.

In the Junior and Senior years the student in this course is required to elect *at least six hours of advanced work in subjects pursued in the Freshman and Sophomore years.* It is practical for the student to specialize in almost any one of the subjects required in the Freshman or Sophomore years as a major subject, and to take minor subjects in other University Schools. This course gives special advantages to students preparing for the professions of medicine, dentistry and pharmacy.

JUNIOR YEAR.

First Semester.	*Credits.*
English—English Composition, six themes (1b); *one hour*	1
Physics—Light and Heat (2); *three hours*	3
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (1); *three hours*	1
Electives—From subjects offered, but with approval of Faculty Committee; *fourteen hours minimum*	14

Second Semester.	
English—English Composition, six themes (1b); *one hour*	1
Physics—Electricity and Magnetism (3); *three hours*	3
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (1); *three hours*	1
Electives—From subjects offered, but with approval of Faculty Committee; *fourteen hours minimum*	14

SENIOR YEAR.

First Semester.	
English—English Composition, three forensics (1c); *one hour*	1
Economics—Principles of Economics (3); *three hours*	3
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (1); *three hours*	1
Electives—From subjects offered, but with approval of Faculty Committee; *fourteen hours minimum*	14

Second Semester.	
English—English Composition, three forensics (1c); *one hour*	1
Economics—Political Economy (4); *three hours*	3
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (1); *three hours*	1
Electives—From subjects offered, but with approval of Faculty Committee; *fourteen hours minimum*	14

III. THE COLLEGE OF APPLIED SCIENCE.

The College of Applied Science comprises three technical schools, as follows:

(1) The School of Mines, which covers a strong theoretical and practical course in Mining and Metallurgy, and leads to the Degree of Bachelor of Science.

(2) The School of Civil Engineering, which gives theoretical and practical training in General Engineering, and leads to the Degree of Bachelor of Science.

(3) The School of Mechanical Engineering, which aims to give very complete training in Mechanical Engineering and Practical Mechanics, and leads to the Degree of Bachelor of Science.

THE SCHOOL OF MINES.

FRESHMAN YEAR.

First Semester.	*Credits.*
English—Literature (2) and Composition (1a); *three hours*	3
French—Elementary French (6); *four hours*	4
Mathematics—College Algebra (1); *five hours*	5
Chemistry—General Chemistry (1); *three hours, one period*	4
Mechanics—Carpentry and Joinery (1); *two periods*	2
Drawing—Freehand Drawing (3); *five hours*	2
Military—Tactics; *one hour.* Drill; *three hours*	1
Second Semester.	
English—Literature (2) and Composition (1a); *three hours*	3
French—Elementary French (6); *four hours*	4
Mathematics—Solid Geometry and Plane Trigonometry (2); *five hours*	5
Chemistry—General Chemistry (1); *three hours.* Qualitative Analysis (3); *three periods*	6
Mechanics—Wood and Iron Work (2); *two periods*	2
Drawing—Mechanical Drawing (3); *five hours*	2
Military—Tactics; *one hour.* Drill; *three hours*	1

SOPHOMORE YEAR.

First Semester.	
Mathematics—Spherical Trigonometry and Plane Analytic Geometry (3); *five hours*	5
Chemistry—Quantitative Analysis (4); *three periods*	3
Mineralogy—Descriptive and Determinative Mineralogy (1); *two periods*	2
Physics—Laboratory Physics (1); *two periods*	2
Mechanics—Shop Work (3); *two periods*	2
French—Modern Prose and Composition (7); *four hours*	4
Drawing—Advanced Freehand Drawing (2); *five hours*	2
Military—Tactics; *one hour.* Drill; *three hours*	1
Second Semester.	
Mathematics—Solid Analytic Geometry (3) and Differential Calculus (4); *five hours*	5
Chemistry—Quantitative Analysis (4); *three periods*	3
Mineralogy—Determinative Mineralogy (1), Blowpipe Analysis (1); *two periods*	2
Physics—Laboratory Physics (1); *two periods*	2
Mechanics—Shop Work (3); *two periods*	2
French—Modern Prose and Composition (7); *four hours*	4
Drawing—Descriptive Geometry; *three hours*	3
Military—Tactics; *one hour.* Drill; *three hours*	1

THE SCHOOL OF MINES.

This school gives a good preliminary training to students who intend to follow as a profession mining or metallurgy. Upon completing the four years' course the student will be proficient in assaying and surveying and well grounded in mining and metallurgy. The laboratories are well equipped, and one of the principal features of the course is that a great deal of laboratory practice is required, for it can hardly be denied that the success of a professional man is not so much dependent upon the amount that he learns in college as it is upon the thoroughness of his knowledge of the subjects undertaken.

JUNIOR YEAR.

First Semester. *Credits.*

Engineering—Surveying (1): Class, *three hours;* Field, *two periods* 5
Assaying—Assaying (2); *one hour, one period* 2
Metallurgy—General Metallurgy (1); *one hour* 1
Mathematics—Integral Calculus (4) and Mechanics (6); *five hours* 5
Geology—Dynamic and Structural Geology (2); *three hours* 3
Physics—Heat and Light (2); *three hours* 3
Military—Tactics; *one hour.* Drill; *three hours* 1

Second Semester.

Engineering—Surveying (1): Class, *three hours;* Field, *two periods* 5
Assaying—Assaying (2); *two periods* 2
Metallurgy—General Metallurgy (1); *two hours* 2
Mathematics—Analytical Mechanics (6); *three hours* 3
Geology—Petrography (3) and Field Excursions (5); *two hours, one period* 3
Physics—Electricity and Magnetism (3); *three hours* 3
Drawing—Graphic Statics; *one period* 1
Military—Tactics; *one hour.* Drill; *three hours* 1

SENIOR YEAR.

First Semester.

Mining—Prospecting, development, drainage and ventilation of Mines, blasting, mining machinery and mining laws; Visit to mines (5); *five hours* 5
Metallurgy—Gold and Silver (4a); *four hours, three periods* 7
Mechanics—Applied Mechanics, Strength of Materials (8); *five hours* 5
Geology—Historical and Determinative Geology (6); *two hours, one period* 3
Spanish—Short Course in Spanish (9); *two hours* 2
Military—Tactics; *one hour.* Drill; *three hours* 1

Second Semester.

Mining—Continuation of above, and General Engineering (5); *five hours* 5
Metallurgy—Copper, Lead and Zinc (4b); *four hours, three periods* 7
Mechanics—Mechanics and Thermodynamics (9); *five hours* 5
Geology—Economic Geology (7); *three hours* 3
Spanish—Short Course in Spanish (9); *two hours* 2
Military—Tactics; *one hour.* Drill; *three hours* 1

THE SCHOOL OF CIVIL ENGINEERING.

The course in Civil Engineering aims to combine strong theoretical training and as much professional practice as possible. While the adaptation of theory to practice can be thoroughly learned only by experience, there are many matters in which the routine work of engineering may be carried out in a technical school. The subjects of mathematics, surveying, physics, chemistry, geology, mechanics, drawing, graphostatics, are treated with special reference to the major subject of Civil Engineering.

FRESHMAN YEAR.

First Semester.	*Credits.*
English—Literature (2) and Composition (1a); *three hours*	3
French—Elementary French (6); *four hours*	4
Mathematics—College Algebra (1); *five hours*	5
Chemistry—General Chemistry (1); *three hours, one period*	4
Mechanics—Carpentry and Joinery (1); *two periods*	2
Drawing—Freehand Drawing (3); *five hours*	2
Military—Tactics; *one hour.* Drill; *three hours*	1
Second Semester.	
English—Literature (2) and Composition (1a); *three hours*	3
French—Elementary French (6); *four hours*	4
Mathematics—Solid Geometry and Plane Trigonometry (2); *five hours*	5
Chemistry—General Chemistry (1); *three hours.* Qualitative Analysis (3); *three periods.*	6
Mechanics—Work in Wood and Iron (2); *two periods*	2
Drawing—Mechanical Drawing (3); *five hours*	2
Military—Tactics; *one hour.* Drill; *three hours*	1

SOPHOMORE YEAR.

First Semester.	
French—Modern Prose and Composition (7); *four hours*	4
Mathematics—Spherical Trigonometry (2), Plane Analytical Geometry (3); *five hours.*	5
Mineralogy—Descriptive and Determinative Mineralogy (1); *two periods*	2
Drawing—Advanced Freehand Drawing (2); *five hours*	2
Mechanics—Shop Work (3); *two periods*	2
Physics—Laboratory Physics (1); *two periods*	2
Military—Tactics; *one hour.* Drill; *three hours*	1
Second Semester.	
French—Modern Prose and Composition (7); *four hours*	4
Mathematics—Solid Analytical Geometry (3), Differential Calculus (4); *five hours*	5
Mineralogy—Determinative Mineralogy (1), Blowpipe Analysis (1); *two periods*	2
Drawing—Descriptive Geometry; *three hours*	3
Drawing—Elementary Machine Design; *three hours*	3
Mechanics—Shop Work (3); *two periods*	2
Physics—Laboratory Physics (1); *two periods*	2
Military—Tactics; *one hour.* Drill; *three hours*	1

THE SCHOOL OF CIVIL ENGINEERING.

The University has recently made valuable additions to the equipment of the Department of Civil Engineering. Two transits of the latest and best type have been put in service. Twenty-four drawing tables of the latest pattern have been placed in the engineering rooms for the exclusive use of students in the Engineering Schools.

The Department of Geology and Mineralogy has been strengthened by the fitting up of new rooms expressly for the use of this Department and by the purchase of new apparatus and machinery.

JUNIOR YEAR.

First Semester.	*Credits.*
Mathematics—Integral Calculus (1) and Mechanics (6); *five hours*	5
Engineering—Surveying (1): Class, *three hours;* Field, *two periods*	5
Geology—Dynamic and Structural Geology (2); *three hours*	3
Physics—Heat and Light (2); *three hours*	3
Political Science—Municipal Law and Ethics (1); *three hours*	3
Drawing—Map Drawing; *two periods*	2
Military—Tactics; *one hour.* Drill; *three hours*	1
Second Semester.	
Mechanics—Analytical Mechanics (6); *three hours*	3
Engineering—Surveying (1): Class, *three hours;* Field, *two periods*	5
Geology—Petrography (3) and Field Excursions (5); *two hours, one period*	3
Physics—Electricity and Magnetism (3); *three hours*	3
Political Science—International Law and Ethics (2); *three hours*	3
Drawing—Graphic Statics; *one period*	1
Military—Tactics; *one hour.* Drill; *three hours*	1

SENIOR YEAR.

First Semester.	
Mechanics—Applied Mechanics (6); Strength of Materials (8); *five hours*	5
Engineering—General Engineering (2); *five hours*	5
Geology—Historical and Determinative Geology (6); *two hours, one period*	3
Political Science—Elements of Economics; *three hours*	3
Spanish—A Short Course in Spanish (9); *two hours*	2
Military—Tactics; *one hour.* Drill; *three hours*	1
Second Semester.	
Mechanics—Mechanics and Thermodynamics (9); *five hours*	5
Engineering—Engineering Structures (3); *five hours*	5
Astronomy—Mathematical Astronomy (5); *two hours*	2
Geology—Economic Geology (7); *three hours*	3
Economics—Political Economy (4); *three hours*	3
Spanish—A Short Course in Spanish (9); *two hours*	2
Military—Tactics; *one hour.* Drill; *three hours*	1

THE SCHOOL OF MECHANICAL ENGINEERING.

The object of instruction in the School of Mechanical Engineering is to give young men sufficient theoretical and practical knowledge to enable them to superintend the designing, construction and erection of improved machinery, and in general to hold positions of responsibility and trust in the field of engineering. It cannot be doubted that the number of educated engineers employed in large manufacturing establishments increases each year, and that more reliance is placed on scientific calculations and deductions in mechanical design than at any time in the past. The course in Mechanical Engineering is broad and effective, though its specialization implies more or less of professional training and preparation, yet the discipline and knowledge gained from the study of principles, together with their constant application in practice, is well suited to all who may be brought face to face with the practical problems of life.

FRESHMAN YEAR.

First Semester.	*Credits.*
English—Literature (2) and Composition (1a); *three hours*	3
French—Elementary French (6); *four hours*	4
Mathematics—College Algebra (1); *five hours*	5
Chemistry—General Chemistry (1); *three hours, one period*	4
Mechanics—Carpentry and Joinery (1); *two periods*	2
Drawing—Freehand Drawing (3); *five hours*	2
Military—Tactics; *one hour.* Drill; *three hours*	1
Second Semester.	
English—Literature (2) and Composition (1a); *three hours*	3
French—Elementary French (6); *four hours*	4
Mathematics—Solid Geometry and Plane Trigonometry (2); *five hours*	5
Chemistry—General Chemistry (1); *three hours.* Qualitative Analysis (3); *three periods.*	6
Mechanics—Work in Wood and Iron (2); *two periods*	2
Drawing—Mechanical Drawing (3); *five hours*	2
Military—Tactics; *one hour.* Drill; *three hours*	1

SOPHOMORE YEAR.

First Semester.	
French—Modern Prose and Composition (7); *four hours*	4
Mathematics—Spherical Trigonometry (2), Plane Analytical Geometry (3); *five hours.*	5
Drawing—Advanced Freehand Drawing (2); *five hours*	5
Mechanics—Shop Work (3); *four periods*	4
Physics—Laboratory Physics (1); *two periods*	2
Military—Tactics; *one hour.* Drill; *three hours*	1
Second Semester.	
French—Modern Prose and Composition (7); *four hours*	4
Mathematics—Solid Analytical Geometry (3), Differential Calculus (4); *five hours*	5
Drawing—Descriptive Geometry; *three hours*	3
Drawing—Elementary Machine Design; *three hours*	3
Mechanics—Shop Work (3); *four periods*	4
Physics—Laboratory Physics (1); *two periods*	2
Military—Tactics; *one hour.* Drill; *three hours*	1
Drawing—Graphic Statics; *one period*	1
Drawing—Steam Boiler Design; *four periods*	4
Military—Tactics; *one hour.* Drill; *three hours*	1

THE SCHOOL OF MECHANICAL ENGINEERING.

The first two years of this course are devoted to Drawing, Modern Languages, Mathematics and Chemistry, together with practical training in the Wood Shop, Forge Shop and the Machine Shop. During the Junior and Senior years the studies are almost purely technical in their character and may be broadly classified under the heads of Mechanics, Machine Design, Measurement of Power, Steam Engineering and practical work in Experimental Engineering.

JUNIOR YEAR.

First Semester.	*Credits.*
Mathematics—Integral Calculus (4) and Mechanics (6); *five hours*	5
Engineering—Surveying (1): Class, *three hours;* Field, *two periods*	5
Mechanics—Kinematics; *five hours*	5
Physics—Heat and Light (2); *three hours*	3
Metallurgy—General Metallurgy (1); *one hour*	1
Drawing—Mechanical Drawing and Design; *three hours, one period*	3
Military—Tactics; *one hour.* Drill; *three hours*	1
Second Semester.	
Mechanics—Analytical Mechanics (6); *three hours*	3
Engineering—Experimental Engineering; *two periods*	2
Engineering—Theory of Steam Boilers; *five hours*	5
Physics—Electricity and Magnetism (3); *five hours*	5
Metallurgy—General Metallurgy (1); *two hours*	2

SENIOR YEAR.

First Semester.	
Mechanics—Applied Mechanics (6), Strength of Materials (8); *five hours*	5
Steam Engine—Theory of Steam Engine; *five hours*	5
Engineering—Theory of Valve Gears (8), Dynamometers and Measurement of Power (6); *four hours*	4
Machine Design—Theory of Machine Design (5); *five hours*	5
Drawing—Advanced Machine Design; *one period*	1
Military—Tactics; *one hour.* Drill; *three hours*	1
Second Semester.	
Mechanics—Mechanics and Thermodynamics (9); *five hours*	5
Engineering—Experimental Engineering; *three periods*	3
Engineering—Steam Engine Design (5); *three hours*	5
Engineering—Mechanical Engineering of Power Plants; *two hours*	2
Economics—Political Economy (4); *three hours*	3
Drawing—Valve and Governor Design; *four periods*	4
Thesis Work—Thesis Work (9); *two periods*	2
Military—Tactics; *one hour.* Drill; *three hours*	1

STATE NORMAL SCHOOL.

The State Normal School offers advanced courses of instruction, both professional and liberal, for students who wish to become teachers in the Grammar and High Schools of Nevada and other States.

The State Normal School is organized as the Department of Education of the State University and provides adequately for the professional training of teachers. Upon a foundation of exact and thorough discipline in all the subjects taught in the public schools is based the professional preparation—theoretical, historical and practical—in the science and art of teaching. As a department of the State University it is possessed of the advantages offered by the well-equipped laboratories and the library and by the strong staff of specialists who compose the University Faculty.

UNIVERSITY AIMS.

The aims of the University in providing instruction in the Science and Art of Teaching are as follows:

1. To fit University students for the higher position in the public school service.
2. To promote the study of educational science.
3. To teach the history of education, and of educational systems and doctrines.
4. To secure to teaching the rights and advantages of a profession.
5. To give unity to our State educational system.

CONDITIONS OF ADMISSION.

1. Applicants for admission to any of the classes in the Normal School must be at least fifteen years of age, and must have a good moral character.

2. Applicants holding any one of the following credentials may be admitted to the First year without examination:

 a. A teacher's certificate of grammar grade, which includes two years' Latin.

 b. A certificate of promotion from the eleventh year of any public school of standard grade, which includes two years' Latin.

 c. Applicants from other States and Territories may be admitted on the same terms and conditions as those given to residents of Nevada.

3. Graduates from any of the Affiliated High Schools of the State will be admitted to the Freshman year upon the presentation of their diploma and a letter of recommendation from the principal of the high school.

4. At the beginning of the year applicants holding none of the above credentials will be admitted upon examination.

THE NORMAL SCHOOL DIPLOMA.

By the provisions of the State school law, the diploma of the Normal School is accepted as evidence of qualification to teach in any school of the State.

GENERAL REQUIREMENTS.

The standard of student work in the Normal School is intended to be high, and the requirements for passing all subjects with credit will be maintained in all cases. The State is liberal in her provisions for the training of teachers and has a right to the best possible preparation on the part of those who wish to teach in her public schools.

TRAINING SCHOOL.

The Reno Public Schools give the Normal students ample opportunity to apply practically their professional training.

By arrangements between the Regents of the State University and the Trustees of the Reno Public Schools, also with the cordial coöperation of the Principal and teachers, the practice teaching and schoolroom training of the Normal students are accomplished in the several grades of a well-organized and carefully graded public school.

STATE NORMAL SCHOOL.

NORMAL GRADE.

(Leading to Grammar School Diploma and State Certificate of Grammar Grade.)

Graduates from the State Normal School, Normal Grade, may enter the Junior year of the College of Arts and Science.

LATIN COURSE.

FIRST YEAR.

First Semester.	*Credits.*
Pedagogics—Lectures on Teaching and Normal Methods (1); *two hours*	2
English—English Literature; *three hours*	3
English—Composition and Spelling; *one hour*	1
Mathematics—Plane Geometry; *three hours*	3
History—United States History and Civics; *five hours*	5
Latin—Cicero and Vergil, Ovid, Vergil's Bucolics (1); *four hours*	4
Physics—Elements of Physics, with laboratory practice; *five hours*	5
Military—Tactics; *one hour.* Drill; *three hours*	1

Second Semester.	
Pedagogics—Lectures on Teaching and Normal Methods (2); *two hours*	2
English—English Literature; *three hours*	2
English—Composition and Spelling; *one hour*	1
Mathematics—Plane Geometry; *three hours*	3
History—United States History and Civics; *five hours*	5
Latin—Ovid, Vergil's Bucolics (1); *four hours*	4
Physics—Elements of Physics, with laboratory practice; *five hours*	5
Military—Tactics; *one hour.* Drill; *three hours*	1

THE FRESHMAN NORMAL YEAR.

First Semester.	
Pedagogics—School Management and Practice (3); *two hours*	2
English—Literature (1) and Composition (1a); *three hours*	3
Latin—Vergil's Æneid, Mythology (1); *five hours*	5
Mathematics—College Algebra (1); *five hours*	5
History—Mediæval History (1); *three hours*	3
Physiology—Physiology and Hygiene; *four hours*	4
Music—Vocal Music; *two hours*	2
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (1); *three hours*	1

Second Semester.	
Pedagogics—Schoolroom Practice (3); *two hours*	2
English—Literature (1) and Composition (1a); *three hours*	3
Latin—Vergil's Æneid (2); *five hours*	5
Mathematics—Solid Geometry; *three hours*, and Trigonometry (2); *two hours*	5
History—Madiæval History (1); *three hours*	3
Botany—General Botany; *four hours*	4
Music—Vocal Music; *two hours*	2
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (1); *three hours*	1

NATURE STUDY.

Twelve lectures and field exercises within the year. These are given on alternate Saturday mornings in months of September, October, November, March, April and May.

THE SENIOR NORMAL YEAR.

FROM STATE SCHOOL LAWS.

1. Upon the recommendation of the President of the University, the Board of Regents shall issue to those who worthily complete the full course of study prescribed in the Nevada State Normal School, a department of the State University, a diploma of graduation, and said diploma shall bear the heading, "The Nevada State Normal School," and to all persons receiving this diploma, the State Board of Education shall issue a State certificate of the Grammar grade, good for five years. To the holders of the above State certificates of the Grammar grade, the State Board of Education shall grant a life diploma when said graduates of the Nevada State Normal School shall have completed at least forty-five months of successful instruction in the public schools of this or of any other state.

2. The Board of Regents may require said Normal School graduates, before granting the diploma herein provided for to sign the following obligation: "I hereby agree to report to the President of the University by letter at least twice a year for three years after my graduation, and once a year thereafter, so long as I continue in the profession of teaching, and when I shall leave the profession I will report the fact to him, with the cause therefor. A failure to make such reports may be considered sufficient cause for the revocation of my diploma."

LATIN COURSE.

First Semester.	*Credits.*
Pedagogics—History of Education (5); *three hours.* Schoolroom Practice (3); *two hours*	5
English—Composition, six themes (1b); *one hour*	1
History—European History (2); *three hours*	3
Mathematics—Arithmetic; *two hours*	2
Psychology—Physiological Psychology (6); *three hours*	3
Chemistry—General Chemistry (1); *three hours*	3
Music—Vocal Music; *two hours*	2
Hygiene—Physical Training for Women (1); *three hours*	1
Second Semester.	
Pedagogics—Philosophy of Education (5); *three hours.* Schoolroom Practice (3); *two hours*	5
English—Composition, six themes (1b); *one hour*	1
History—European History (2); *three hours*	3
Mathematics—Arithmetic (9); *two hours*	2
Psychology—General Psychology (7); *three hours*	3
Chemistry—General Chemistry (1); *three hours*	3
Music—Vocal Music; *two hours*	2
Hygiene—Physical Training for Women (1); *three hours*	

NATURE STUDY.

Twelve lectures and field exercises within the year. These are given on alternate Saturday mornings within the months of September, October, November, March, April, and May.

NORMAL GRADE.

(Leading to Grammar School Diploma and State Certificate of Grammar Grade.)

Graduates from the State Normal School, Normal Grade, may enter the Junior year of the College of Arts and Science.

SCIENCE COURSE.

FIRST YEAR.

First Semester.	*Credits.*
Pedagogics—Lectures on Teaching and Normal Methods; *two hours*	2
English—English Literature; *three hours*	3
English—Composition and Spelling; *one hour*	1
Mathematics—Plane Geometry; *three hours*	3
History—United States History and Civics; *five hours*	5
Physics—Elements of Physics, with laboratory practice; *five hours*	5
German—Reading and Composition; *four hours*	4
Military—Tactics; *one hour.* Drill; *three hours*	1

Second Semester.	
Pedagogics—Lectures on Teaching and Normal Methods; *two hours*	2
English—English Literature; *three hours*	3
English—Composition and Spelling; *one hour*	1
Mathematics—Plane Geometry; *three hours*	3
History—United States History and Civics; *five hours*	5
Physics—Elements of Physics, with laboratory practice; *five hours*	5
German—Reading and Composition; *four hours*	4
Military—Tactics; *one hour.* Drill; *three hours*	1

THE FRESHMAN NORMAL YEAR.

SCIENCE COURSE.

First Semester.	
Pedagogics—School Management and Practice; *two hours*	2
English—Literature (2) and Composition (1a); *three hours*	2
German—Schiller's Jungfrau von Orleans and Prose Composition (2); *four hours*	4
Mathematics—College Algebra (1); *five hours*	5
Zoölogy—General Zoölogy (1); *four hours*	4
Hygiene—Physiology and Hygiene; *four hours*	4
Hygiene—Physical Training for Women (1); *three hours*	1
Music—Vocal Music; *two hours*	2
Military—Tactics; *one hour.* Drill; *three hours*	1

Second Semester.	
Pedagogics—Schoolroom Practice; *two hours*	2
English—Literature (2) and Composition (1); *three hours*	3
German—Schiller's Wilhelm Tell and Maria Stuart (2); *four hours*	4
Mathematics—Solid Geometry; *three hours.* Plane Trigonometry (2); *two hours*	5
Botany—General Botany (1); *four hours*	4
Hygiene—Physical Training for Women (1); *three hours*	1
Music—Vocal Music; *two hours*	2
Military—Tactics; *one hour.* Drill; *three hours*	1

NATURE STUDY.

Twelve lectures and field exercises within the year. These are given on alternate Saturday mornings in months of September, October, November, March, April and May.

THE SENIOR NORMAL YEAR.

The course of study in the State Normal School, Normal Grade, covers a period of three years, and is equivalent to the third year of the University High School and of the Freshman and Sophomore years of the College of Arts and Science. The Science Course differs from the Latin Course in that it substitutes Zoölogy and Botany for History, and German for Latin. The object of the Science Course is to give teachers whose tastes lead them to the study of science, the advantages of special training for the teaching of science in the public schools.

SCIENCE COURSE.

First Semester.	*Credits.*
Pedagogics—History of Education; *three hours.* Schoolroom Practice; *two hours*	5
English—Composition, six themes (1b); *one hour*	1
Mathematics—Arithmetic; *two hours*	2
Psychology—Physiological Psychology (6); *three hours*	3
Chemistry—General Chemistry (1); *two hours, one period*	3
Physics—Laboratory Physics (1); *two periods*	2
Music—Vocal Music; *two hours*	2
Bookkeeping—Bookkeeping (1); *one period*	1
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (1); *three hours*	1
Second Semester.	
Pedagogics—Philosophy of Education; *three hours.* Schoolroom Practice; *two hours*	5
English—Composition, six themes (1b); *one hour*	1
Mathematics—Arithmetic; *two hours*	2
Psychology—General Psychology (7); *three hours*	3
Botany—Structural and Systematic Botany (2); *four hours*	4
Chemistry—General Chemistry (1); *two hours, one period*	3
Physics—Laboratory Physics (1); *two periods*	2
Music—Vocal Music; *two hours*	2
Bookkeeping—Bookkeeping (1); *one period*	1
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (1); *three hours*	1

NATURE STUDY.

Twelve lectures and field excursions within the year. These are given on alternate Saturday mornings in months of September, October, November, March, April and May.

LATIN COURSE.

Leading to High School Diploma and State Certificate of High School Grade and also to the Degree of B.A.)

COLLEGE GRADE.

1. The Normal School, College Grade, offers a strictly College Course of four years and is the equivalent of the courses of study offered in the College of Arts and Science. Twelve hours of professional study and research and eight laboratory hours of practice teaching in the Reno Public Schools are required. A State high school certificate is given by the State Board of Education to graduates from the four years' course of the State Normal School.

2. Students in the Normal School, College Grade, may matriculate also in the College of Arts and Science and receive the degree of Bachelor of Arts or Bachelor of Science at graduation.

3. In the Junior and Senior years each student is required to elect at least six hours of advanced work in subjects pursued in Freshman and Sophomore years.

JUNIOR YEAR.

First Semester.	*Credits.*
English—Composition, six themes (1b); *one hour*	1
Political Science—Municipal Law and Ethics (1); *three hours*	3
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (2); *three hours*	1
Electives—From subjects offered in any School, but with approval of Faculty Committee; *fourteen hours minimum*	14

Second Semester.	
English—Composition, six themes (1b); *one hour*	1
Political Science—International Law and Ethics (2); *three hours*	3
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (2); *three hours*	1
Electives—From subjects offered in any School, but with approval of Faculty Committee; *fourteen hours minimum*	14

SENIOR YEAR.

First Semester.	
English—Composition, three forensics (1c); *one hour*	1
Political Science—Elements of Economics; *three hours*	3
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (2); *three hours*	1
Electives—From subjects offered in any School, but with approval of Faculty Committee; *fourteen hours minimum*	14

Second Semester.	
English—Composition, three forensics (1c); *one hour*	1
Economics—Political Economy (4); *three hours*	3
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (2); *three hours*	1
Electives—From subjects offered in any School, but with approval of Faculty Committee; *fourteen hours minimum*	14

SCIENCE COURSE.

COLLEGE GRADE.

1. The Normal School, College Grade, offers a course of study equivalent to the four years' course in the College of Arts and Science. Twelve hours of professional study and research and eight laboratory hours of practice teaching in the Reno Public Schools are required.

2. Students in the State Normal School, College Grade, may matriculate also in the College of Arts and Science and receive the Degree of Bachelor of Arts or Bachelor of Science at graduation.

3. In the Junior and Senior years each student is required to elect at least six hours of advanced work in subjects pursued in Freshman and Sophomore years.

SCIENCE COURSE.

(Leading to High School Diploma and State Certificate of High School grade and also to the Degree of B.S.)

JUNIOR YEAR.

First Semester.	*Credits.*
English—Composition, six themes (1b); *one hour*	1
Physics—Light and Heat (2); *three hours*	3
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (2); *three hours*	1
Electives—From subjects offered, but with approval of Faculty Committee; *fourteen hours minimum*	14

Second Semester.	
English—Composition, six themes (1b); *one hour*	1
Physics—Electricity and Magnetism (3); *three hours*	3
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (2); *three hours*	1
Electives—From subjects offered, but with approval of Faculty Committee; *fourteen hours minimum*	14

SENIOR YEAR.

First Semester.	
English—Composition, three forensics (1c); *one hour*	1
Political Science—Elements of Economics; *three hours*	3
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (2); *three hours*	1
Electives—From subjects offered, but with approval of Faculty Committee; *fourteen hours minimum*	14

Second Semester.	
English—Composition, three forensics (1c); *one hour*	1
Economics—Political Economy (4); *three hours*	3
Military—Tactics; *one hour.* Drill; *three hours*	1
Hygiene—Physical Training for Women (2); *three hours*	1
Electives—From subjects offered, but with approval of Faculty Committee; *fourteen hours minimum*	14

UNIVERSITY COURSES OF INSTRUCTION.

ORDER OF SUBJECTS.

I. Agricultural Science.
II. Art and Science of Education.
III. Biological Science.
IV. Botany and Horticulture.
V. Chemistry.
VI. Domestic Arts and Science.
VII. English Language and Literature.
VIII. Entomology.
IX. Geology and Mineralogy.
X. Greek Language and Literature.
XI. History and Political Science.
XII. History of Art.
XIII. Hygiene and Physical Training for Young Women.
XIV. Latin Language and Literature.
XV. Law and Economics.
XVI. Mathematics and Mechanics.
XVII. Mechanical Engineering.
XVIII. Mechanic Arts.
XIX. Drawing.
XX. Metallurgy and Assaying.
XXI. Military Science.
XXII. Mining and Civil Engineering.
XXIII. Modern Languages.
XXIV. Physics.

I. AGRICULTURAL SCIENCE.

PROFESSOR TRUE, PROFESSOR WILSON, AND DOCTOR KENNEDY.

1. Agriculture. *5 hrs., both terms. Junior.*

In this course the following topics are considered: Brief historical outline; comparison of ancient and modern methods; value of the farm plant of the United States; selection of farming land; farm implements and machinery; preparation of soil for crops; cultivation, harvesting and sale of crops; drainage; management of teams. PROFESSOR TRUE.

2. Agriculture. *5 hrs., both terms. Senior.*

Farm accounts, employment and management of labor; soils; irrigation; farm buildings; mixed farming; rotation of crops; silos; breeds of live stock; stock feeding. PROFESSOR TRUE.

3. Forestry. *3 hrs., first term. Senior.*

Importance of the subject of forestry; rank and value of forest products; effects of deforestation; forest supply; Government timber land; what and how to plant; revenue from forest areas; what forestry management is and what it is not. Lectures, with liberal reading of subject literature. PROFESSOR TRUE.

4. Elements of Veterinary Science. *5 hrs., first term. Senior.*

The purpose is to give the student such practical instruction as will enable him to treat all ordinary diseases and accidents to which the domestic animals are liable. PROFESSOR TRUE.

5. Chemistry of Soils, etc. *4 hrs., both terms. Junior.*

Lectures (2) and laboratory practice (2) upon the quantitative analysis of soils, fertilizers, agricultural products, etc., how plants grow, mineral basis of soil, chemical effect of tillage, feeding stuffs, etc. *Johnson:* How Crops Grow and How Crops Feed. PROFESSOR WILSON.

6. The Dairy. *3 hrs., second term. Senior.*

The instruction consists of lectures upon the formation and composition of milk; ferments and their action; testing for purity and value; methods of manufacture of cheese and butter. The lectures are supplemented by practical work with different testing apparatus, and by the inspection of dairies and creameries fitted with modern apparatus. PROFESSOR WILSON.

7. Horticulture. *5 hrs., second term. Sophomore.*

The course will include lectures on fruit-growing, vegetable gardening, the propagation of plants, the making of lawns, ornamental shrubs, and the beautifying of home and farm grounds. DR. KENNEDY.

8. Economic Botany. *4 hrs., second term. Junior.*

A study of the history and evolution of the most important economic plants. Fungus diseases of cultivated plants and their remedies. Required in the School of Agriculture. DR. KENNEDY.

9. Field Practice. *All Classes.*

Freshman; Instruction in teams and implements, 2 hours per week, September and October. Sophomore; Instruction in Seeding and Hot-beds, 2 hours per week, April and May. Junior; Instruction in Dynamometer, 2 hours per week, September and October. Senior; Instruction in Grafting and Tree-trimming, 2 hours per week, April.

10. Nomenclature.

Under the head of Agriculture, the following technical nomenclature for the various subjects has been approved by the American Association of Agricultural Colleges. (1) Agronomy—Climate, soils, tillage, drainage, irrigation, fertilizers, plant production, farm crops; (2) Zoötechny—Principles of breeding, breeds of live stock, stock-feeding; (3) Agrotechny—Butter-making, cheese-making, beet-sugar production; (4) Rural Engineering—Roads, drains, irrigation system, farm buildings and machinery; (5) Rural Economics—History of Agriculture, farm management, rural law, farm accounts.

11. Nature Study.

This course is given semi-monthly during September, October and November of the first semester and March, April and May of the second semester. It has for its object the instruction of teachers and others in the best methods of teaching Nature Study. The course has in view the advancement of the agricultural interest of the State by developing a love for and a knowledge of plants and animals in the hearts and minds of Nevada school children. The happiness and welfare of the rural classes can be greatly enhanced by giving them a knowledge of the common things which surround them in everyday life. Required of all Freshman and Senior Normals. DR. KENNEDY, PROFESSOR FRANDSEN, ASSISTANT PROFESSOR DOTEN.

II. ART AND SCIENCE OF EDUCATION.

PROFESSOR ADAMS AND PROFESSOR FRANDSEN.

1. Elements of Pedagogy. *2 hrs., first term, first year.*

The work of this course consists of lectures, discussions and reproductions of the essential points upon the following topics: The teacher: professional training, aims, equipments and personality. The pupil: mental, moral and physical traits, habits of study and obedience, character building. The school organization: course of study, programme of recitation, management, discipline; moral suasion and force, their relative values and interdependence. *Fitch:* Theory and Practice of Teaching. PROFESSOR ADAMS.

2. Special Methods. *2 hrs., second term, first year.*

The aim in this course is to lead to an understanding of the relations of methods and matter to mind. Specific aims and methods in practical school work in the common school studies—arithmetic, grammar, geography, history, etc.—are studied and observed in the training school and the public schools of Reno, discussed in class and used as the basis of practice work with pupils, extra credits being given for new ideas in illustration or original devices which pass the test with classes of children. Knowledge papers, showing that the student has the requisite knowledge of principles to give a series of lessons upon important topics as: fractions, percentage, the pronoun, the verb, etc., are required. Power of imparting knowledge by each of the general methods, viz: instruction and questioning, must be fully shown in a series of illustrative science lessons, showing the logical plan of building up knowledge, and skill in bringing out the perceptive and discriminating powers in the mind of the child. PROFESSOR ADAMS.

3. Practice Teaching. *2 hrs., four terms.*

The requirement for this course is the completion of one year of pedagogical work. The object is to bring out the individual powers of the student-teacher in teaching and governing a school. Plan of preparation: An outline of central and related points, covering a week's work, divided into daily lessons, is prepared and presented to the critic teacher. If approved, it is referred to the Principal, who thereupon assigns the student to class work under the supervision of critic teacher. For a definite time each lesson is outlined and methods and devices indicated. No unprepared or desultory work is allowed. PROFESSOR ADAMS. PRINCIPAL BRAY, and teachers of the Reno Public Schools.

4. History of Education. *3 hrs., first term. Senior year.*

The objects of this course are to enable students to obtain clear outlines of the educational ideals of the leading nations of the past and present; the Chinese, Persians, Hindu, Egyptian, Grecian, Roman, European and United States; to gain a general idea of the fundamental principles in the teachings of their great philosophers and teachers, and to note the successes and failures in the ways and methods used to realize national ideals, with their direct and indirect influences upon national characteristics, and thus arrive at a clearer and broader view of the permanent truths and grander aims in the educational system of to-day. *Compayre:* History of Education. *References:* Davidson, and Library Work.

5. Philosophy of Education. *3 hrs., second term. Senior year.*

Part I. Oral analysis and written reproduction of thought in logical arrangement are required upon the general idea of education, its nature, its form, its limits; while the practical bearings of the sub-topics of work and play, habits, punishments, corrective and retributive (also preventive), different temperaments and capacities, processes of growth of the lower into higher faculties, are used for subjects of "talks" and more elaborate class essays.

Part II. Similar plans of work are carried through the second part of the book, the results sought being not only a knowledge of the facts and principles of education, but the culture or power of applying this knowledge to the art of teaching. *Rosenkranz:* Philosophy of Education.

6. Physiological Psychology. *3 hrs., first term. Senior Normal.*

Lectures, assigned readings and laboratory demonstrations. In the lectures, the anatomy and physiology of the human central nervous system and sense organs will be discussed with special reference to their relation to the mental phenomena.

7. Psychology. *3 hrs., second term. Senior Normal.*

Lectures, recitations, reports, and occasional laboratory demonstrations. This course must be preceded by Courses 5 and 6. Titchener's Primer of Psychology will be used as a text-book, supplemented by assigned reading.

III. BIOLOGICAL SCIENCE.

PROFESSOR FRANDSEN.

1. General Zoölogy. *4 hrs., first term. Sophomore.*

Lectures and laboratory. This course is an introduction to the whole field of zoölogy. It is intended for those who expect to teach natural science in the public schools and as a broader training for the study of the structures and functions of the human body. Some of the topics to be considered are the systematic positions and relations of animals, the differentiation of complex systems of tissues and organs from the simple, the activities and habits of animals, the main facts of development evolution theories, etc. In the laboratory a number of animal types are studied, beginning with the simplest and proceeding to the most highly organized. Special attention is given to the physiological activities of common animals. The laboratory work will take two periods a week of two hours each, and must come on Mondays, Wednesdays and Fridays.

2. Comparative Anatomy and Physiology of Vertebrates. *4 hrs., both terms. Senior.*
Lectures and laboratory. This course can only be taken by those who have previously had Courses 1 and 5, or their equivalents. It is designed for those who wish to lay a broad foundation for the subsequent study of humam anatomy in the medical school, or who wish to do further advanced work in any field of zoölogy. The lectures aim to show the progressive development of structures from the lower to the higher vertebrates. In the laboratory the student will make dissections of the fish, frog, turtle, rabbit and pigeon, or allied forms. The course may be varied somewhat for the students in the School of Agriculture, more attention being paid to the study of the domestic animals.

3. Histology. *4 hrs., first term.*
Lectures and laboratory. This course must be preceded by Courses 1 and 2. The object of this course is a training in methods of killing, fixing, sectioning, staining and mounting objects for microscopic study. The student will either make preparations of some small animal, like the leech, earth worm or tadpole, or study the tissues and organs of some animal, like the frog or rabbit, devoting the whole term to the thorough study of one form.

4. Embryology. *4 hrs., second term.*
Lectures and laboratory. The laboratory work consists of the preparation and study of the frog or chick at successive stages of development.

5. Elementary Anatomy, Physiology and Hygiene. *4 hrs., first term.*
Recitations, lectures and laboratory. Special attention will be given to the subject of personal hygiene, emergencies, etc. The text-book work will be supplemented by assigned readings and reports. The laboratory work will consist of some microscopic work on the tissues and organs, simple physiological experiments and demonstrations, chemical reactions illustrative of the process of digestion, and the dissection of some vertebrate.

6. General Bacteriology. *3 hrs., second term. Senior.*
Assigned readings, lectures and laboratory. The following topics will be considered: Morphology and classification of bacteria. Methods of making cultures, staining, etc., fermentation, putrefaction, pathogenic bacteria. In the laboratory the student will learn how to make pure cultures and slide preparations of the more common bacteria.

7. Invertebrate Zoölogy. *4 hrs., second term.*
This course must be preceded by Course 1 or its equivalent. The laboratory work is comparative study of the anatomy and physiology of the leading types of invertebrates and a final comparison with one vertebrate.

IV. BOTANY AND HORTICULTURE.

DR. KENNEDY.

1. General Botany. *4 hrs., second term. Freshman.*
The course includes a general résumé of plant life from the lowest to the highest forms; slime, moulds, algæ, lichens, fungi, liverworts, mosses, ferns, horsetails, club-mosses, conebearers and flowering plants. Special attention is given to the plants in each group of economic importance.

2. Structural and Systematic Botany. *4 hrs., second term. Sophomore.*
The course includes a study of the structure and relationships of the orders of flowering plants, with practical work in the field and laboratory illustrating the principles of natural classification.

3. Advanced Botany. *4 hrs., first term. Junior.*
The student will be introduced to methods of investigation, the use of the microtome, and the preparation of microscopic slides. Preliminary studies of the vegetable cell and its contents. Kind of tissue. Problems can be assigned suitable for a thesis providing the work is continued throughout two years. Open only to students who have taken Courses 1 and 2.

4. Economic Botany. *4 hrs., second term. Junior.*
A study of the history and evolution of the most important economic plants. Fungus diseases of cultivated plants and their remedies. Required in School of Agriculture.

V. CHEMISTRY.

PROFESSOR N. E. WILSON.

1. General Chemistry. *3 hrs., both terms. Freshman.*

Non-metals, metals, and the carbon compounds; theoretical and descriptive. Recitations and lectures with illustrative experiments. Classroom work supplemented with laboratory exercises, one hour, first semester. *Richter:* Inorganic Chemistry. *Remsen:* Chemistry of the Carbon Compounds. Freshman Science Schools.

2. General Chemistry. *3 hrs., both terms. Sophomore.*

Non-metals, metals, and the carbon compounds; theoretical and descriptive. Recitations and lectures with illustrative experiments. Classroom work supplemented with laboratory exercises, one hour, both terms. *Remsen:* Inorganic Chemistry.

3. Qualitative Analysis. *3 hrs., second term. Freshman.*

This laboratory course includes the detection of the more common metals and acids, both in single and mixed substances. *Sharwood:* Qualitative analysis.

4. Quantitative Analysis. *3 hrs., both terms. Sophomore.*

This course includes the gravimetric determination of the components of simple salts, limestone, feldspar, coal, ores of the common metals, acidimetry and alkalimetry, and volumetric analysis. After the general course as outlined is finished the work is completed by individual assignments. *Ladd:* Manual of Quantitative Chemical Analysis.

5. Organic Chemistry. *3 hrs., first term. Junior.*

Elements of Organic Chemistry as laid down in *Remsen's* Organic Chemistry. Laboratory exercises, one hour. *Orndorf's* Laboratory Manual.

6. Chemistry of Foods. *3 hrs., second term. Junior.*

Chemical composition and nutritive values of foods; attention will be also given to the adulteration of foods.

7. Industrial Chemistry. *3 hrs., second term. Junior.*

The application of chemistry to the industrial arts. Recitations and lectures.

8. Domestic Science Course. *3 hrs., both semesters.*

a. Second year: General Chemistry, lectures and text-book. Principles of Chemistry and Chemical Nomenclature. The non-metals and metals; Laboratory practice, one period, first semester. Qualitative analysis, two periods, second semester.

b. Third year: Lectures embracing: Chemistry of plants, organic and inorganic, essential and non-essential ingredients; sources of plant food, air and soil, assimible and reserve plant food.

Foods; Carbohydrates, fats, nitrogenous substances, sources and manufacture of sugar, starch, glucose, etc.

Ferments and fermentation, and their application in the manufacture of vinegars, wines and malt liquors.

Chemistry of milk and its products.

Food adulteration and adulterants.

Potable water and a discussion of water from various sources from a sanitary view.

9. Dietetics. *2 hrs., both terms. Senior.*

Special course in Dietetic Value of Foods and in computing Dietaries.

VI. DOMESTIC ARTS AND SCIENCE.

MISS BARDENWERPER.

1. Sewing. *2 periods, both terms. First year.*

The purpose of this course is to instruct in the various stitches used in hand sewing and mending, including the different seams, hems, patching, darning and buttonholes in cotton and woolen goods. The student prepares models that involve this work. This course also teaches the care and use of the sewing machine, and the draughting and making of undergarments, the fitting and making of shirt waists, cotton dresses and children's dresses, and the draughting of patterns from measure. Work begun in the class is required to be finished at home. Talks on Textiles are given from time to time.

2. Sewing. *2 periods, both terms. Second year.*

During this year the draughting of patterns from chart is taken up, and the student has extensive practice in making patterns of waists and skirts. Each student is required to draft, fit and make a dress of plain woolen materials. During the latter part of this course, the proper handling of stripes and plaids is taught, and each student cuts, fits and stitches a waist of either striped or plaid materials. The first steps in millinery are included in the work of this year. This comprises the care of materials, the making and applying of folds, wiring, binding and lining of hats. The various kinds of facings—plain, sectional and shirred—are prepared and placed. Bow-making is taught, both as applies to hats and to dresses. Practice materials—canton flannel, silkolene, cheese-cloth, satine and cambric—are used this year.

3. Sewing. *2 periods, both terms. Third year.*

The student is directed in the making of a fancy waist; original work is done, and she is encouraged to exercise her individual taste in making dress trimmings, finishings, and designs. The work in millinery is continued throughout this year. Hat and bonnet frames are covered, and tam crowns are made of practice materials. Instruction is given in the making and handling of rosettes and puffs, and in the remodeling of bonnet and hat frames. Two shirred hats are made, one of practice materials, and one of chiffon. The student is taught to make wire and buckram hat and bonnet frames. The renovating of silk, lace and velvet fabrics forms part of the work in this course. Lectures are given in harmony of outline and color.

4. Sewing. *2 periods, second term. Senior.*

The most advanced work in sewing is done in this semester—the drafting, cutting, fitting, and making of a tailor-finished gown. Advanced millinery comes in as part of the course in sewing for this term. Each student is expected to trim several hats, in the materials appropriate for the season. Feather curling, draping of veils, and the principles of ruche and boa-making are now taken up. The handling of crape, the most difficult work in millinery, finishes this course.

5. Cookery. *2 periods, both terms. First year.*

The best arrangement of the kitchen in every detail of its plan and furnishings, both as regards convenience and proper sanitary conditions, is first considered. Methods to be used in the care of china, glassware, silver, and cooking utensils are taught. The selection, composition, and preparation of the simple foods form the basis of the first part of this year's work. Food values are discussed from a dietetic standpoint. The first practice work comprises the cooking, according to economic standards, of the typical and simple foods—eggs, cheese, meats, soups, vegetables, sauces, plain salads, and desserts; the preparation and use in various forms of batters—muffins and griddle cakes and doughs—breads, biscuit, doughnuts, cake, and pastry. Demonstrations of frying, roasting, and broiling are given. Cuts of meat are studied from the chart and from actual experience gained in visits to the market. During the latter part of this year more advanced work in practice cookery is done, elaborating the principles taught earlier in the course; and the student begins to rely upon her own judgment in the preparation of entrées, salads and salad dressings, sauces, desserts, frozen creams, ices, sherbets.

6. Cookery. *2 periods, both terms. Second year.*

The dining-room, its arrangement and appointments, is considered with reference to approved and artistic principles. Menus are prepared by the student in accordance with dietetic and economic standards. The garnishing of dishes and serving of meals is discussed. Practice work this year consists in the preparation of more elaborate dishes—fancy cakes, soufflés, frostings, sauces, pastries, including puff paste, salads, and salad dressings. This work is followed by a course in Invalid Cookery. The essential feature in this course is the preparation and dainty serving of individual dishes.

7. Cookery. *2 periods, both terms. Third year.*

Jelly making, preserving and canning of fruits and vegetables, pickling, making of chow-chows and catsups form part of this year's work. Practice in candy making follows; this includes all varieties of French bonbons (those requiring fondant as their basis), and the simpler, so-called home-made candies and glacé fruits. Greater proficiency is attained in advanced cookery, and a series of demonstrations in the use of the Chafing Dish is given.

8. Cookery. *2 periods, first term. Senior.*

The main feature of this course is the calculation of dietaries according to individual needs, physical conditions, age and occupation being considered. The practice work consists in the preparation of the meals thus computed, some time being given to advanced fancy cookery. A luncheon is served at the end of this semester.

9. Household Economics. *1 hr., both terms. Senior.*

This course comprises lectures and informal talks on the home, its location and construction, with special attention to the arrangement and furnishing of the kitchen, laundry and sleeping room, according to approved hygienic methods of ventilating, heating, lighting, etc. The general care of the house is discussed. The use of chemicals in cleansing—removing of stains, etc.—for laundrying purposes, and as disinfectants are considered. Proper methods of laundrying table and bed linen and clothes are taught, together with the handling of laces, colored embroideries, and curtains. Estimates, in pursuance of economic principles, are made by the students of the cost of time by the day, the month, and the year for the individual and the family, incomes varying in amount being used as the basis for calculation.

THE ENGLISH LANGUAGE AND LITERATURE.

PROFESSOR CUSHMAN.

1. Composition and Rhetoric.

a. Theme-Writing. *3 hrs., both terms. Freshman.*

The frequent writing of narrative, critical, descriptive and argumentative essays. Drill in the fundamental principles of composition. *Scott and Denny:* Paragraph-Writing.

b. Forensics. *2 hrs., both terms. Elective.*

Essays embodying original research. Oral discussions of current topics. Exercises in argumentative composition. Lectures on the principles of argumentation. Elective, with the consent of the instructor, to all classes.

2. The History of English Literature. *3 hrs., both terms. Sophomore.*

Lectures with reports on assigned readings. *Taine:* History of English Literature.

3. Shakespeare. *3 hrs., both terms, Junior–Senior.*

A study of representative plays of Shakespeare. Reports and discussions. *Woodbridge:* The Drama; its Laws and its Technique.

4. Modern Poetry. *3 hrs., both terms. Junior–Senior.*

The reading and interpretation of selections from Wordsworth, Tennyson and Browning.

VIII. ENTOMOLOGY.

ASSISTANT PROFESSOR DOTEN.

1. General Course. *3 hrs., second term. Senior.*

Lectures on the habits and transformations of our most interesting insects, with the characteristics of the orders, sub-orders, etc.

2. Economic Entomology. *Junior–Senior. Elective*

Lectures and field work on our dangerous insect pests. Discussions of their life histories and the best means of combating them.

IX. GEOLOGY AND MINERALOGY.

DR. LOUDERBACK.

1. Mineralogy: Elementary. *2 hrs., both terms. Sophomore.*

a. Lectures on (1) the general properties of minerals, with particular reference to their use in determinations of species.

b. Laboratory: (1) Determination of minerals by observation methods and simple tests useful in fields; (2) Blowpipe mineral analysis.

Prerequisite: Elementary Chemistry and Laboratory.

2. Geology: Dynamic and Structural. *3 hrs., first term. Junior.*

Illustrated lectures.

3. Petrography. *3 hrs., second term. Junior.*

The nature, origin and distinctive properties of rocks.

Prerequisites: Mineralogy (1) and Geology (2).

4. Geological Laboratory.

(1) Rock constituents and rock structures. *1 hr., second term. Junior.*

Supplementary to Course 3.

(2) Study of rock groups: (*a*) petrographic, (*b*) stratigraphic. *1 hr., first term, Senior.*

Supplementary to Courses 3 and 6, and following course 4.

5. Field Geology. *1 hr., second term. Junior.*

A practical study of field methods and their application to the formations in the vicinity of the University, with practice at map reading and plotting of results.

Prerequisites: Course 3 (may be taken simultaneously); ten days of actual satisfactory field work during second term.

6. Geology: Historical. *13 hrs., first term. Senior.*

An outline of the history of the earth, as written in the rocks of the crust and the topographic forms of the surface; with the distinctive characteristics of the rocks of the different geological periods, especially in Western America.

Prerequisite: Geology (2).

7. Geology: Economic. *3 hrs., second term. Senior.*

A discussion of the nature and origin of ore and other economic deposits, and a study of their mode of occurrence in typical and important mining regions.

Prerequisites: All the above courses.

8. Geology: Advanced Work.

This State, even in the vicinity of the University, offers a particularly open and inviting field of investigation in all of the branches of geological science—physiography (physical geography), petrography, and glacial, stratigraphic and economic geology.

The work may consist of:

1. The study of some special geologic problem, or of the geology of some special district in the field, and the preparation of results.

2. The investigation of special problems, or the study of material gathered in the field, by chemical or microscopical laboratory methods.

3. Critical reading and discussion of important scientific economic monographs, and of current geological literature.

X. GREEK LANGUAGE AND LITERATURE.

PRESIDENT STUBBS AND DR. CHURCH.

1. Beginning Greek. *4 hrs., both terms. Freshman.*

Thorough drill is given in the elements of the Greek language, along with a liberal amount of reading in Xenophon and Herodotus. *White:* Beginner's Greek Book. *Goodwin:* Selections from Xenophon and Herodotus.

2. The Iliad or Odyssey. *4 hrs., both terms. Sophomore.*

The reading of Homer's Iliad or Odyssey is accompanied throughout the year by methodical instruction in Greek Grammar, Greek Prose Composition and History of Ancient Greeks. *Goodwin:* Greek Grammar. *Allison:* Greek Prose Composition. *Pennell:* History of Ancient Greece.

3. Lysias and Plato. *3 hrs., first term. Junior.*

A critical reading of the orations of Lysias and Plato's Apology of Socrates is made the preparation of an appreciative study of Greek civilization.

4. Æschylus. *3 hrs., second term. Junior.*

The Prometheus Bound of Æschylus and lectures on the orators and dramatists of Greece.

5. Euripides and Sophocles. *3 hrs., first term. Senior.*

Exposition of the Greek drama. The Alcestis of Euripides and the Electra of Sophocles.

6. Greek Testament. *4 hrs., second term. Senior.*

Critical reading of the Gospel of St. John, with lectures on the common dialect and on Hellenistic Greek.

XI. HISTORY AND POLITICAL SCIENCE.

ASSISTANT PROFESSOR WIER.

1. Mediæval History. *3 hrs., both semesters. Freshman.*

Course 1 covers the period from the Fourth to the Fifteenth Century. Beginning with the history of the barbarian invasion, it traces the development of primitive Germanic institutions, the rise of the mediæval church and the papacy, the expansion of the Frankish Empire, the establishment of feudalism, the formation of modern states, the important features of the Renaissance, and the beginning of the Reformation. Special stress is placed on the study of forces and of the great world movements with the aim of giving the proper perspective for the appreciation of modern history. A knowledge of the main facts of Ancient History is essential to the successful pursuance of this course.

2. History of Europe in the Seventeenth, Eighteenth, and Nineteenth Centuries.

3 hrs., both semesters. Sophomore.

The aim is to trace political and social development as well as international relations since the Peace of Westphalia. Special attention will be given to the rise of Russia and of Prussia, and to the change in Western Europe from the absolutism of the "Old Régime" to the democracy and individualism of the Nineteenth Century.

3. History of England to 1485. *2 hrs., both semesters (3 hrs. credit). Junior.*

The purpose of the course is to give the student a clear view of the period from Prehistoric and Roman Britain and the English settlements, through the growth of the English Kingship and the development of the Parliamentary Constitution to 1485. The character of the work will render desirable previous training in history on the part of the student. This course is important as a preparation for the study of law.

[Course 3 will not be given in 1902–3.]

4. The History of England Since 1845. *2 hrs., both semesters (3 hrs. credit). Junior.*

Course 4 alternates with Course 3, and is likewise important as a preparation for the study of law. The political history is traced merely as a background for the study of the growth of the English Parliament and the Cabinet system. Comparisons are constantly made between the existing forms of government and administration in the various countries of Europe and America.

5. Constitutional and Political History of the United States, 1775-1840.

3 hrs., both semesters. Senior.

This course is a detailed study of the political and constitutional questions arising during the period of the formation of the Union. Open to graduate students and seniors; also, by special permission, to those below Senior rank.

6. Constitutional and Political History of the United States Since 1840.

3 hrs., both semesters. Senior.

Course 6 alternates with Course 5, of which it is a continuation. Commencing with the later period of the slavery struggle, it covers the questions of secession, rebellion, and reconstruction. Particular attention is given to the discussion of present political problems. Open, by special permission, to advanced students below Senior rank.

[Course 6 will not be given in 1902–3.]

7. Special Courses.

Special courses of study for graduate students will be laid out to fit the needs of each individual. Research work may thus be carried on under the guidance of the department.

8. Thesis Work.

In each of the first six courses in History the student is required to prepare a thesis embodying the results of independent work in the investigation of some special topic. When a student is taking two or more courses in History the same semester, he may select his thesis in connection with either of them.

XII. HISTORY OF ART.

ASSOCIATE PROFESSOR MARTIN.

1. History of Art Through the Renaissance. *1 hr., both terms. Elective.*

The development of art with special reference to painting is briefly traced from its

beginnings to the Renaissance. The lives and work of the great masters of the Fifteenth, Sixteenth, and Seventeenth Centuries will then be especially considered, with a view not only to establishing some principles of art criticism, but to understanding life and history so far as art is the interpreter. As far as possible, the works of the masters will be studied from photographs and lantern slides of the originals. Lectures. MISS MARTIN.

XIII. HYGIENE AND PHYSICAL TRAINING FOR YOUNG WOMEN.

MISS EDWARDS. *3 hrs., both terms.*

The aim of the work in this department is: (1) To give the student instruction in matters pertaining to the preservation and restoration of health. (2) Thorough practical gymnastic work to assist in the general bodily development.

Each student is given an anthropometrical and medical examination. The data gained through the measurements and examination is used as a basis for instructing the student in the hygienic principles most conducive to good health; to prescribe work for the correction of special weakness and also for the symmetrical bodily development. Athletic and gymnastic games are included in work. The student takes part in these from choice and is not allowed to do any gymnastic or athletic work for which she is not physically able. Basket-ball, lawn tennis and bicycling are all encouraged.

For the work in this department the University affords a splendid gymnasium building with a floor space 60 feet by 120 feet. Its equipment is fair, including rings, pulley weights, wands, dumb-bells, Indian clubs and a few pieces of special apparatus.

Course 1. Individual and class work, with and without apparatus. *3 hrs., per week.*

Course 2. Designed for all students who are going to become teachers in public or private schools, and includes instruction in school hygiene and in schoolroom gymnastics. *3 hrs., per week.*

XIV. LATIN LANGUAGE AND LITERATURE.

PROFESSOR CHURCH.

1. Vergil. *5 hrs. Freshman.*

Æneid, Mythology. The literary and stilistic features of the Æneid will be emphasized. *Comstock:* The Æneid of Vergil. *Gayley:* Classic Myths.

2. Livy. *3 hrs., first term. Sophomore.*

Livy's History of Rome, Book, XXI, Prose Composition. *Greenough and Peck:* Livy, XXI–XXII. *Miller:* Prose Composition. [This course will be omitted in 1902–3.]

3. Cicero. *3 hrs., first term. Sophomore.*

Cicero, De Senectute, Prose Composition, Sight Reading. *Kelsey:* Cicero, De Senectute. *Miller:* Prose Composition. *Post:* Latin at Sight.

4. Horace, Catullus and Tibullus. *3 hrs., second term. Sophomore.*

Selected lyric poems of Horace, Catullus and Tibullus. *Smith:* Horace, Odes and Epodes. *Crowell:* Selections from the Latin Poets. [This course will be omitted in 1902–3.]

5. Plautus and Terence; The Drama. *3 hrs., second term. Sophomore.*

Selected comedies. *Fowler:* Plautus, Menaechmi. *Sloman:* Terence, Phormio.

6. Roman Literature. *1 hr., second term. Sophomore.*

Lectures and recitations on the development and decline of Roman literature. *Wilkins:* Roman Literature, supplemented by assigned readings.

Courses 1 and 6 and any two of Courses 2–5 are required for the Degree of Bachelor of Arts.

7. Roman Antiquities and Life. *2 hrs., first term.*

Lectures illustrated by lantern views and supplemented by assigned readings. [This course will be omitted in 1902–3].

8. Rapid Reading, *2 hrs., first term (credit, 1 hr.).*

Selections from various authors. The translation will be mostly at sight, and very little preparation for the lesson will be required. *Peck and Arrowsmith:* Roman Life in Latin Prose and Verse.

9. Horace and Juvenal: Satire. *3 hrs., second term.*
Characteristic satires. *Greenough:* Satires and Epistles of Horace. *Pearson & Strong:* Thirteen Satires of Juvenal.

10. Tacitus and Pliny the Younger. *3 hrs., second term.*
Furneaux: The Germania of Tacitus. *Wescott:* Selections from Pliny's Letters. [This course will be omitted in 1902–3].

Any one or more of Courses 2–5, not previously pursued, and 7–10 may be elected by those who have finished the required courses in Latin.

XV. LAW, ETHICS, AND ECONOMICS.

PRESIDENT STUBBS AND PROFESSOR LEWERS.

1. Municipal Law and Ethics. *3 hrs., first term. Junior.*
The object of this course is to study the subject of law with a view to the duties and responsibilities of citizenship. Lectures and text with required readings.

2. International Law and Ethics. *3 hrs., second term. Junior.*
The principles of International Law are studied in their relation to the political life and history of modern nations. Text and required readings.

3. Economics. *3 hrs., first term. Senior.*
The principles of Economics in their relation to modern industrial life. Text and required readings.

4. Political Economy. *3 hrs., second term. Senior.*
The elements of Political Economy are studied with aid of text and library reading.

XVI. MATHEMATICS AND MECHANICS.

PROFESSOR THURTELL.

1. College Algebra. *5 hrs., first term. Freshman.*
Begins with quadratic equations, and includes logarithms, the Binomial Theorem, determinants and the general properties of equations. *Bowser.*

2. Solid Geometry and Trigonometry. *5 hrs., second term. Freshman.*
Trigonometric functions, practice in the use of plane and spherical triangles, and in the application of spherical trigonometry to the elementary problems concerning the astronomy of the earth.

3. Analytic Geometry. *5 hrs., first term. Sophomore.*
The geometry of the conic sections and the equations of geometrical surfaces principally. Subject holds a prominent place in all engineering colleges. *Wentworth:* Analytical Geometry.

4. Calculus. *5 hrs., second term. Sophomore.*
Necessary in all engineering courses. Both the differential and the integral calculus. *Osborne:* Calculus.

5. Astronomy. *2 hrs., second term. Senior.*
A course of study in mathematical astronomy with special reference to the subject of civil engineering. *Green:* Practical Astronomy.

6. Statics, Kinetics, Kinematics. *3 hrs., both terms. Junior.*
Many practical and difficult problems are solved by the students, and the effort is made to develop originality of thought and strong mental power. The calculus is freely used.

7. Hydraulics. *2 hrs.. second term. Junior.*
Some of the subjects considered are: Equilibrium of liquids, pressure of a liquid at any depth, strength of embankments, strength of pipes, pressure of gases at various temperatures, resistance and work of liquids, hydraulic machines, water wheels and pumps.

8. Strength of Materials. *5 hrs., first term. Senior.*
This course covers work in applied mechanics, analysis of structures, both by graphical and analytic methods, roof trusses, bridge trusses, stress strain, etc.

9. Thermodynamics. *5 hrs., second term. Senior.*

The laws of the expansion and compression of gases and of steam. The relation between heat and work. The relation between inner and outer work done on a body. Practical illustrations of these laws in a steam engine, the gas engine and the injector *Rontgen and Dubois:* Thermodynamics.

XVII. MECHANICAL ENGINEERING.

PROFESSOR BLESSING AND MR. DARLING.

1. Descriptive Geometry. *3 hrs., second term. Sophomore.*

The representation of points, lines and planes is taught, together with problems relating to the right line and plane. Curved lines, tangents, normals, cylindricals, conical and warped surfaces, the helicoid, the hyperboloid, and problems relating to them; shades and shadows and the principles of perspective and isometric projection are studied. Many practical problems are given for solution and construction.

2. Kinematics. *5 hrs., first term. Junior.*

Under the head of kinematics is studied the geometry of machinery, showing the laws which govern the velocity of moving parts, velocity ratio in various motions, the correct forms for gear teeth, quick return motions, link motions and the manner of designing trains of mechanism. The mathematical demonstrations and proofs are first studied from text book, aud then practical problems are given to the student to solve on the drawing board.

3. Electricity and Magnetism. *5 hrs., second term. Junior.*

Some of the subjects considered in this work are Frictional Electricity, Magnetism, Current Electricity, Electrostatics, Electro-magnetics, Measurements of Currents, Thermo-electricity, Heat, Power and Light from Electric Currents, Inductance, Dynamos, Motors, Transformers, Electro-chemistry, Telegraphy, Telephony, and Electric Waves.

4. Theory of Steam Boilers. *5 hrs., second term. Junior.*

Here is studied the design and construction of the various types of commercial steam boilers; including methods of riveting and staying; the care of boilers, the prevention of scale and corrosion, consumption of fuel, determining the horse power of boilers, the design of boilers for efficiency and economy, the methods of power transmission and the study of modern boiler plants. At the completion of the text book each student is required to design a boiler or battery of boilers and necessary fittings. This includes the preparation of specifications and complete working drawings ready for the boiler maker and the erecting engineer.

5. Machine Design. *5 hrs., first term. Senior.*

This work includes a study of the application of the laws of velocity force and strength of materials to the design of machinery. The design of tooth and belt gearing, shafts, journals, hangers, cylinders, springs, bolts, keys, etc. The text-book work is strengthened by the practical work on the drawing board.

6. Steam Engine Design. *3 hrs., second term. Senior.*

Here the principles involved in the design of all parts of the steam engine are carefully considered, together with the theoretical indicator diagrams for simple, compound and triple expansion engines. Crank effort diagrams, illustrating the influence of friction and of the reciprocating and rotative parts, are taken up, and finally the valve motion and weight of the reciprocating parts are designed to give results which will conform to an assumed ideal indicator card.

7. Dynamometers and Measurement of Power. *4 hrs., first term. Senior.*

This study includes the determination of driving power, friction brakes, absorption dynamometers, transmission dynamometers, the measurement of water and electrical power and power required to drive machinery. The text book is followed by experimental work in the laboratory.

8. Power Plants. *2 hrs., second term. Senior.*

In the industrial and business world to-day the power plant occupies a place of importance which it never has had hitherto, and the success or failure of business enterprises and manufacturing corporations often depends upon the condition of the power house. In order to judge fairly the advantages and disadvantages involved in questions

relating to the power plant the engineer must be familiar with the solutions which experience and good judgment have proposed for similar problems. To this end the mechanical engineering of power plants is here presented in rather a non-mathematical way and the machinery appliances and economical auxiliaries employed have their practical and experimental side shown.

9. Valve Gearing. *4 hrs., first term. Senior.*

This is a study of the various forms of standard engine valves, link motions, radial gears and shaft regulation. The mathematical proofs of the methods and results attained by the Zenner, Bilgram, Reuleaux and Elliptical diagrams are studied from the text book, after which the designing of the valve gears becomes a drawing-board process. Each student before completing the work must design some form of standard engine valve and governor; the data being taken from trade catalogues and engines actually in use.

10. Thesis Work. *2 periods, second term. Senior.*

The later part of the second semester of the Senior year is given to thesis work. This consists of some new design of a machine or an original investigation of some subject congenial to the student's taste and included in the scope of the course. The subjects for these theses are assigned to the student by the head of the Mechanical Engineering Department; and the completed theses, together with the drawings and illustrations accompanying them, are kept on file that they may serve as reference for future investigations.

11. Inspection Visits.

It is the desire of the department to arrange for an inspection trip to the most important manufacturing establishments in the vicinity in order that the student may make a study of modern structures and methods in manufacture. The practical value of such excursions has long been recognized by such institutions as Kentucky State College, Rose Polytechnic Institute, Purdue University, Boston "Tech," Case School of Applied Science, and many others, where they have become regular features of the course. These trips are for Juniors and Seniors only.

XVIII. MECHANIC ARTS.

MR. DARLING.

1. Wood Shop. *2 periods, both terms. Freshman.*

The wood shop contains four power wood-turning lathes, one Fay Egan tilt-table jig-saw, one Fox wood trimmer, one combination wood planer and circular-saw machine, one band saw, one wood-paneling machine, one grindstone, twenty-four benches and fifteen sets of wood-worker's tools.

The work in this branch of the department is required of students in Mechanical Engineering, Civil Engineering and Mining Engineering, and may be taken by any other male students desiring it, provided accommodations are at hand. At present there are thirty students. This work is carried through both semesters of the Freshman year, and the instruction is intended to familiarize the student with the use of hand and machine tools and with the most approved methods and processes followed in engineering construction. The text book used in connection with the practical work is: *Goss:* Bench Work in Wood. The bench work includes the following operations: Plowing, sawing, rabbeting, planing, notching, splicing, mortising, tenoning, dovetailing, framing, paneling, and the general use of carpenters' tools. The wood turning involves the various principles of lathe work in wood, and is carried on from a set of blue prints issued by the department for that purpose.

Pattern-making, which gives the student discipline in the construction of patterns for foundry work, is taken only by students in Mechanical Engineering.

2. Forge Shop. *4 periods, both terms. Sophomore.*

The forge shop contains eight forges equipped with smithing tools, and is fitted with pressure and exhaust system piping and fans. The work in forging includes exercises in heating, bending, drawing, upsetting, plain welding, butt welding, lap welding, ring welding, tee welding, etc. In steel forging the exercises include the making and tempering of punches, drills, chisels, annealing, case-hardening and the making of a complete set of machine-cutting tools for the student's future use in the machine shop.

3. Machine Shop.

The machine shop is equipped as follows: One shaper, three machine lathes, one drill press, one sensitive drill, one universal grinder, one milling machine, one pipe-cutting machine, one dry emery wheel, one wet emery wheel, four vises, an engine and a dynamo. Instruction in this work consists of vise work in iron, including surface chipping, surface filing, squaring and fitting, round filing, sawing, scraping and polishing. Machine work in metals includes exercises in straight and taper turning, slotting, drilling, boring, planing and screw cutting. Practice in the machine shops begins with a series of simple exercises teaching the proper use of the hammer, chisel, and file; the laying out of work, and the use of the lathe, shaper, milling machine, etc. As the student becomes familiar with the use of tools and machines, he is given work on simple machine details and construction, and finally assembles the parts into the complete machine.

TRADE CATALOGUE LIBRARY.

In order to familiarize the student in Mechanical Engineering with the different manufacturing firms throughout the country, and the progress they are making in perfecting engines, pumps, boilers, dynamos, etc., there has been added a trade catalogue library. The trade literature of to-day is gotten out in the most attractive form possible, and with an educational motive in view. Many catalogues are text books of a very high order, and gotten out with the express idea of teaching the practical man the theoretical, and the theoretical man the practical, nature and advantages of the machine the firm is placing upon the market. The benefit derived by referring to these books, in connection with the class-room work, is at once apparent, renewed interest being shown by the student in his text-book work when he sees the practical and commercial applications of the theories he is studying.

XIX. DRAWING.

PROFESSOR BLESSING AND MR. DARLING.

Courses marked † require knowledge of the text as laid down in the School of Mechanical Engineering.

1. Freehand Drawing. *5 hrs., first term. Freshman.*

2. Mechanical Drawing. *5 hrs., second term. Freshman.*

Course 1 for Domestic Arts and Science, and General Science. Courses 1 and 2 for Mechanical, Agricultural, Civil, and Mines. Course 2 is open to those completing Course 1.

†3. Advanced Freehand Drawing. *5 hrs., first term. Sophomore.*

†4. Descriptive Geometry. *3 hrs., second term. Sophomore.*

5. Elementary Machine Design. *3 hrs., second term. Sophomore.*

Courses 3, 4, and 5, Mechanical and Civil. Course 4, Mines. Course 3 is open to those who have completed Course 1; Courses 4 and 5 to those having completed Course 2.

†6. Kinematics and Mechanism. *11 hrs., first term. Junior.*

†7. Graphic Statics. *2⅓ hrs., second term. Junior.*

†8. Steam Boiler Design. *10 hrs., second term. Junior.*

Courses 6, 7, 8, Mechanical; Course 7, Mines and Civil. Courses 6 and 7 open to those who have completed Course 4. Course 8 open to those who have completed Course 5.

†9. Advanced Machine Design. *2⅓ hrs., both terms. Senior.*

†10. Valve and Governor Design. *10 hrs., second term. Senior.*

Course 9 is open to those who have completed Course 5; Course 10 to those who have completed Courses 7 and 9.

XX. METALLURGY AND ASSAYING.

PROFESSOR YOUNG.

1. General Metallurgy. *1 hr., first; 2 hrs., second term. Junior.*

Production of metals; physical properties of the more important metals and alloys; metallurgical products and classification of processes, fuels, furnaces; preparation of ores, crushing and sampling. Lectures and text.

2. Assaying. *Both terms. Junior.*

Assays of gold and silver ores by scorification and crucible methods. Assays of furnace products, gold and silver bullion. Crushing and preparation of samples; use of horn and batea and pan. Lectures, 1 hour, first term, Junior. Laboratory, 1 period throughout the year. First term: Cupellation, parting, scorification and sampling. Second term: Crucible methods, bullion assays and practice on miscellaneous ores. Text.

Prerequisites: Quantitative Chemistry and Mineralogy.

3. Assaying—Short Course.

Cupellation, parting, scorification and sampling. Laboratory. Text only. Two periods per week for first six weeks of the second term. This course is open to those who have not completed the necessary work in Chemistry and Mineralogy.

4a. Metallurgy of Gold and Silver. *4 hrs., first term. Senior.*

Lectures. A discussion of the ores, processes for separation (amalgamation, chlorination, cyaniding, etc.); equipment and organization of plants.

4b. Metallurgy of Copper, Lead and Zinc. *4 hrs., second term. Senior.*

Lectures and text. Methods of treating lead, copper and zinc ores; equipment and organization of plant; discussion of the economic conditions in the problem of treating copper, lead and other ores.

4c. Metallurgical Laboratory. *3 periods, both terms. Senior.*

Laboratory experiments on ores. Designed to illustrate and supplement Courses 4a and 4b, and to give the student a working knowledge of the principal process.

Prerequisites: Quantitative Chemistry, Assaying and Mineralogy.

5. Metallurgical Laboratory. *2 to 4 periods.*

Assignment of special problems in the treatment of ores. Designed to supplement Course 4c.

Prerequisites: Quantitative Chemistry, Assaying, Mineralogy, etc.

XXI. MILITARY SCIENCE.

CAPTAIN BOYD.

1. Military Drill. *3 hrs., both terms. All male students.*

The practical instructions consist of squad, company and battalion drills of infantry, both in close and extended order, small-arms target practice, advance guard, rear guard, outposts, ceremonies, practice marches, signal drills, band practice.

2. Theoretical Course. *1 hr., both terms. All male students.*

The theoretical work consists of recitations in the study of infantry drill regulations covered by the practical instruction; the manual of guard duty; small-arms firing regulations, Parts I, II and VII; the articles of war; and company records and papers. In addition lectures are given on the following subjects: The organization of the United States Army, including volunteers and militia; patrols and outposts; marches; camps and camp hygiene; lines and bases of operations; attack and defense of advance and rear guards and outposts, and convoys.

XXII. MINING AND CIVIL ENGINEERING.

PROFESSOR WRINKLE.

1. Surveying. *5 hrs., both terms. Junior.*

Theory and practice of land, topographical, railroad and mine surveying. Field work and map drawing in connection therewith.

2. General Engineering. *5 hrs., first term. Senior.*

Materials of construction, strength of materials, highways and pavements, hydraulics, dams, irrigating canals, reservoirs, water pipes, foundations of structures, masonry, retaining walls, earthwork.

3. Engineering Structures. *5 hrs., second term. Senior.*

A study from text, models and actual examples of the principal types of structures, such as roof trusses, bridges, etc. Determination of stresses, both analytically and graphically, and supplemented by the work in the Drawing Academy.

4. Drawing.

Topographic drawing and map making. "Reinhart's Lettering" is used as a text for lettering.

5. Mining. *5 hrs., both terms. Senior.*

Lectures on prospecting, development, drainage and ventilation of mines, blasting, mining machinery and mining laws, visits to mines.

XXIII. MODERN LANGUAGES.

PROFESSOR DE LAGUNA AND MISS WHEELER.

1. Elementary German. *4 hrs., both semesters. Freshman.*

The aim of the first year's work in German is to combine the advantages of abundant oral practice with thorough drill in grammar. Collar's "Eysenbach," Huss' "Preparatory German Reader," Volkmann's "Kleine Geschichten," Baumbach's "Waldnovellen." PROFESSOR DE LAGUNA.

2a. Schiller. *4 hrs., first semester. Sophomore.*

Schiller's Jungfrau von Orleans, Wilhelm Tell or Maria Stuart. Special attention will be given to the play from a literary and historical standpoint, while drill in grammar will be obtained from frequent exercises in prose composition. *Harris:* German Prose Composition. MISS WHEELER.

2b. Goethe, Lessing, Heine. *4 hrs., second semester. Sophomore.*

Egmont, Nathan der Weise, Die Harzreise. These works will be read with a view to developing the understanding and appreciation of the difference and variety in style and thought of their authors. The reading will be accompanied by the study of the lives of the men.

3. Goethe. *3 hrs., both semesters. Junior.*

Goethe's Faust will be studied (Parts I, II), with lectures on the history and development of the Faust legend and the philosophical and ethical ideas of the drama. The study of the drama is accompanied by lectures on the life of Goethe as it enters into his work. *Thomas:* Goethe's Faust. MISS WHEELER.

4. History of German Literature.

Lectures and recitations on the period from Luther to Goethe. Bernhardt's Deutsche Litteraturgeschichte will be used as a text-book, while references will be given to other standard works.

5. Seminary in Conversational German.

Open to all students who have completed Course 1. PROFESSOR DE LAGUNA.

6. Elementary French. *4 hrs., both semesters. Freshman.*

The aim of this course is to give a thorough drill in grammar and facility in reading easy French. *Chardenal:* Complete French Course. *Rollin:* Preparatory French Reader. *Michaud:* Poésies de quatre à huit vers. PROFESSOR DE LAGUNA.

7. Sophomore French. *4 hrs., both semesters.*

The study of grammar is continued with Grandgent's "Essentials of French Grammar as the text. Prose Composition Work is begun. Text read: Souvestre's "Le Philosophe sous les toits"; Erckmann-Chatrian's "L'Ami Fritz"; Sandeau's "Mademoiselle de la Seigliere"; Lamartine's "Scènes de la révolution française"; Augier's "Le gendre de M. Poirier." PROFESSOR DE LAGUNA.

8. French Dramatists. *3 hrs., both semesters. Junior.*

In this course are read Molière's "Les précieuses ridicules," "Les femmes savantes," "Le misanthrope," and "Tartuffe"; Corneille's "Le Cid" and "Polyeucte"; Racine's "Esther" and "Athalie"; Hugo's "Hernani" and Rostand's "Cyrano de Bergerac." A study in French literature is made with Duval's "Histoire de la littérature française" as a basis. The students are required to write out in French synopses of the plays read. PROFESSOR DE LAGUNA.

9. Elementary Spanish. *2 hrs., both semesters. Senior.*

This elementary course in the Spanish language is for those students who expect to make immediate and practical use of Spanish in their vocation as engineers or business

men. Therefore only so much of grammar as may be necessary in the acquirement of a ready use of words and idioms is taught in this course. Required of Senior Mines. PROFESSOR DE LAGUNA.

XXIV. PHYSICS.

DOCTOR LOUDERBACK.

1. Physical Laboratory. *2 periods, both terms. Sophomore.*

A series of more or less careful quantitative experiments intended to give the student a practical knowledge of the fundamental laws of Physics, and to introduce him to careful quantitative measurement. Care, neatness, exactness, and close scientific reasoning are the characteristic features of the work.

2. Light and Heat. *3 hrs., first term. Junior.*

Illustrated lectures.

Prerequisite: Course 1.

3. Electricity and Magnetism. *3 hrs., second term. Junior.*

Illustrated lectures.

Required as Course 2.

THE UNIVERSITY HIGH SCHOOL.

Preparatory to the University Schools.

GENERAL STATEMENT.

The Department of Secondary Education in the University has been organized by the Faculty of the University and approved by the Regents, in order to secure adequate preparation for the University and to offer the advantages of thorough high school training to the many young people who live in sections of the State where there are no high schools. *In all cases where high schools are established, students should finish the work in the home school, and not seek admission to the University High School.*

COURSES OF STUDY.

The courses of study cover the usual high school period of three years, but differ from the usual High School Courses in that they seek to prepare as thoroughly and as quickly as possible for admission to the Freshman Class of the University.

THE LATIN COURSE.

The Latin Course herewith prescribed gives, in the judgment of the University Faculty, the best preparation for the University Schools, and it advises this course to be followed, so far as possible, by students preparing for the University. All the subjects prescribed in this Latin Course are required for admission to the Freshman Class of the University, except Latin, for which students may offer an equivalent in other subjects, such as French, German, Spanish, History, Chemistry, Botany, Zoölogy, or Physical Geography. Latin is of course required for admission to the School of Liberal Arts and the Latin Course of the State Normal School.

THE GERMAN COURSE.

This course gives adequate preparation for all the Science Courses in the University. It allows a reasonable choice of subjects preparatory to the University as between Latin, German and Elementary Science, or History and Elementary Science.

COMMERCIAL COURSE.

GENERAL STATEMENT.

The Commercial Course has a very distinct aim: to prepare young people for a business life, but without sacrificing the solid requirements of a complete High School course of study. The course of study as herewith given is equal to the requirements in the better class of English High Schools, and includes a very complete and thorough discipline in stenography, bookkeeping, typewriting and commercial law upon the foundation of a sound English education.

STANDARD AND DIPLOMA.

The Principal of this School will require the most thorough work, and diplomas will be granted only to those who complete the course of study with signal credit. Diplomas will be granted at any time upon the satisfactory completion of the course.

CONDITIONS OF ADMISSION.

For admission to the High School applicants will be required to present a certificate for the full course of an approved grammar school, or pass an examination upon the subjects usually completed within the eight years of the primary and grammar grades, viz: Arithmetic, language, descriptive geography, reading and penmanship. Applicants are requested to bring with them certificates from their last teachers, setting forth what studies the applicants have taken. This certificate should state how much time has been given to each study, the text-book used and the percentage grade received. Blank certificates for the above information will be sent free upon application to the President of the University. In case satisfactory certificates are offered, the applicant will be excused from examination in all subjects except reading, writing, composition and spelling.

UNIVERSITY HIGH SCHOOL.

LATIN COURSE.

Admits to all the University Schools.

Junior High.

English—English Literature; *three hours* 3
English—English Grammar; *four hours* 4
English—Composition and Spelling; *one hour* 1
Mathematics—Arithmetic; *three hours.* Algebra; *two hours* 5
Latin—Beginning Latin; *five hours* 5
Bookkeeping—Elements of Bookkeeping; *three hours* 3

Middle High.

English—English Literature; *three hours* 3
English—Composition and Spelling; *one hour* 1
Mathematics—Algebra; *five hours.* Plane Geometry; *two hours* 7
Latin—Miscellaneous Selections, including Cæsar; *five hours* 5
History—Ancient History; *three hours* 3
Drawing—Freehand Drawing; *two hours* 2

Senior High.

English—English Literature; *three hours* 3
English—Composition and Spelling; *one hour* 1
Mathematics—Plane Geometry; *three hours* 3
History—United States History and Civics; *five hours* 5
Latin—Ovid, Vergil's Bucolics and Mythology; *four hours* 4
Physics—Elements of Physics, with Laboratory Practice; *five hours* 5

GERMAN COURSE.

Admits to all University Schools except Liberal Arts and the Latin Normal.

Junior High.

English—English Literature; *three hours* 3
English—English Grammar; *four hours* 4
English—Composition and Spelling; *one hour* 1
Mathematics—Arithmetic; *three hours.* Algebra; *two hours* 5
German—First Lessons in German; *three hours* 3
Science—Natural History; *two hours* 2
Bookkeeping—Elements of Bookkeeping; *three hours* 3

Middle High.

English—English Literature; *three hours* 3
English—Composition and Spelling; *one hour* 1
Mathematics—Algebra; *five hours.* Plane Geometry; *two hours* 7
German—Easy Reading and Conversation; *three hours* 3
Science—Natural History; *two hours* 2
History—Ancient History; *three hours* 3
Drawing—Freehand Drawing; *two hours* 2

Senior High.

English—English Literature; *three hours* 3
English—Composition and Word Study; *one hour* 1
Mathematics—Plane Geometry; *three hours* 3
History—United States History and Civics; *five hours* 5
German—Reading and Composition; *four hours* 4
Physics—Elements of Physics, with Laboratory Practice; *five hours* 5

COMMERCIAL COURSE.

Admits to the University School of Commerce.

Junior High.

English—English Literature; *three hours* 3
English—English Grammar; *four hours* 4
English—Composition and Spelling; *one hour* 1
Mathematics—Arithmetic; *three hours.* Algebra; *two hours* 5
Bookkeeping—Elements of Bookkeeping; *five hours* 5
Typewriting—Typewriting; *five hours* 2

Middle High.

English—English Literature; *three hours* 3
English—Composition and Spelling; *one hour* 1
Mathematics—Algebra; *five hours.* Plane Geometry; *two hours* 5
Drawing—Freehand Drawing; *two hours* 2
Stenography—Stenography; *five hours* 5
Bookkeeping—Bookkeeping; *five hours* 2

Senior High.

English—English Literature; *three hours* 3
English—Composition and Spelling; *one hour* 1
Mathematics—Plane Geometry; *three hours* 3
Stenography—Stenography; *five hours* 5
Bookkeeping—Bookkeeping; *two periods* 2
Law—Commercial Law; *two hours* 2
History—United States History and Civics; *five hours* 5

OUTLINE OF HIGH SCHOOL SUBJECTS.

BUSINESS STUDIES.

1. Bookkeeping.

The subject of bookkeeping receives its due attention as a medium of intellectual training, and its value is recognized by placing it in nearly all courses.

The first year's work embraces the work outlined in the Sadler-Rowe Budgets A and B-1, or in an equivalent amount of work in the later publications of the same company. The second year's work embraces B-2 and C 1 and 2, together with the voucher system and miscellaneous exercises in auditing and accounting, corporation bookkeeping, etc. The work is individual in character and each student progresses according to his capability.

The work in the various courses outlined in the University High School and in the Normal School will be arranged according to the time assigned to the subject.

2. Commercial Law.

The course includes the subjects of negotiable paper, sales of personal property, agency, bailments, liens, interest, real estate conveyances, etc. The text is supplemented by lectures on subjects germane to the subject. Text: Parson's Law of Business.

3. Stenography.

Dement's Pitmanic Shorthand Text is used and is adequate for all classes of stenographic work. The purpose of the course is to ground the student thoroughly in the principles of the art, and the instruction is carried through four terms. A good commercial speed is required, but the student will be carried as far as circumstances permit.

4. Typewriting.

This work consists of the exercises given in the Van Sant charts, which follow the touch system. The first part of the work consists of word exercises, and this is followed by letter writing, copying legal documents, etc. The department is equipped with three Smith Premiers, two Remingtons, one Century and one Bar Lock, all of the latest models.

LATIN.

1. Latin—Latin lessons, accompanied from an early stage by the reading of simple selections such as found in Collar's New Gradatim. The work of the first year should be devoted to the acquisition of an exact knowledge of forms, and the application of

that knowledge in translating from Latin into English and from English into Latin. The vocabularies should be thoroughly mastered. Attention should be given to simple etymologies, especially such as throw light upon the meaning of English words. The Latin should be read with due attention to quantity and accent. *The writing of exercises* from English into Latin should be continued throughout the course, the student continuing to make the corrections as indicated by the teacher until the exercise is made perfect. *Sight Translation* of simple Latin, such as is found in D'Ooge's Colloquia Latina, should accompany the above studies throughout the year. The student should be trained to grasp the meaning of the Latin independently of, and as a preliminary to, the formal rendering into idiomatic English; and should be taught to read the Latin aloud with intelligent expression. The equivalent of one hour per week should be devoted to translation at sight. This work may form a part of each daily recitation, but better results will be obtained by reserving for it an entire recitation period. In place of the preparation usually required, the student should be assigned an exercise for translation from English into Latin.

Texts: Collar and Daniell's First Year Latin; Collar's New Gradatim; D'Ooge's Colloquia Latina. *5 hrs., both semesters, Junior year.*

2. Latin—Miscellaneous selections of easy Latin, including selections from Cæsar's Gallic War.

Prose Composition based upon the text.

Latin Grammar—Survey of principles of syntax and peculiarities of word order.

Sight Translation of easy exercises as found in D'Ooge's Easy Latin for Sight Translation. One recitation per week.

Greenough, D'Ooge and Daniell's Second Year Latin; Bennett's Elementary Latin Grammar; D'Ooge's Easy Latin for Sight Translation, and Latin Composition Sheet. *5 hrs., both semesters, Middle year.*

3. Latin—Selections from Ovid, Vergil's Bucolics, Mythology.

Sight Translation continued in D'Ooge's Easy Latin for Sight Translation. Scansion, and reading with expression.

Texts: Kelsey's Selections from Ovid; Harper and Miller's Vergil; Æneid and Bucolics; Gayley's Classic Myths; D'Ooge's Easy Latin for Sight Translation. *4 hrs., both semesters, Senior year.*

MATHEMATICS.

1. Arithmetic—Advance and review work in the leading subjects of Arithmetic. A thorough review of the Metric system of Weights and Measures. Give a variety of problems and exercises in application of the tables. Pupils should know the exact value of each metrical unit and its equivalent in English measure and weight. *3 hrs., both semesters, Junior year.*

2. Algebra—Elementary Algebra through equations of the first degree (simple and simultaneous), factoring H. C. F. and L. C. M. Much oral work, especially in factoring. Elementary algebra, fractions, fractional equations, quadratic equations (single and simultaneous) and powers and roots. Increase the amount of demonstration of principles. Introduce liberally purely literal expressions. *2 hrs., both semesters, Junior year; 5 hrs., both semesters, Middle year.*

3. Geometry—Plane Geometry, first year. Fifty propositions with abundant exercises to be assigned as a part of every lesson. Much oral work as a training in correct use of language. No algebraic symbolism in this first year of geometry—pure geometry.

Plane Geometry, second year. Seventy-five propositions with exercises assigned as part of each lesson. Algebraic methods may be introduced, but distinction between algebraic and geometrical should not be lost sight of. *2 hrs., both semesters, Middle year; 3 hrs., both semesters, Senior year.*

HISTORY, CIVICS, AND ECONOMICS.

1. History of England—A short course dealing with important epochs rather than a continuous narrative of political events. The purpose of the course is to give a general view of the literary, industrial, and constitutional development of the English people. *3 hrs., Junior English year.*

2. Ancient History—This course during the first-half year deals with the characteristics of the early Oriental and the primitive American peoples. It is designed to give the

student an insight into the origin and development of civilization. The last half-year is devoted to a study of Greek and Roman institutional ideas. Constant reference is made to the work of the previous semester. *3 hrs., Middle year.*

3. American History and Civics—A study of the development of the political, economic, religious, social, and educational life in America. The expansion of Europe and especially of England in American explorations, commerce, and settlement will be considered; also the development of English political principles. Civil government will be studied in connection with the history of the development of our institutions. *5 hrs., Senior year.*

4. Elementary Economics—After a brief consideration of the great epochs of industrial development in Great Britain and America, this course will be devoted to a discussion of the most fundamental economic problems of the present times. The purpose of the course is to train the student in the observation and interpretation of present-day phenomena and to excite in him a taste for further study of economic and social questions. *4 hrs., Senior English year.*

Note: When special text-books are required, notice will be given at the beginning of the College year. Students are encouraged to own or to have access to a variety of the best and latest authorities. Preparatory students are allowed the use of the University Library, which contains numerous reference works on History and Civics. An attempt is made to render the work in these courses practical by showing the vital connection between the present and the past. Students are trained in the ability to handle historical materials, to form historical judgments, to make comparisons, and to formulate opinions.

ELEMENTS OF PHYSICS.

Physics is insisted upon as the first and fundamental science requirement because it seems best suited for a training in clear thinking and exact expression and for an introduction to the scientific method of reasoning. It is the aim of the course to make the student familiar with the more simple and important laws of Physics, together with a knowledge of the actual working of the law as shown by experiments, and particularly as illustrated in everyday and home life. The laws of no other science give such ready and important assistance in understanding and controlling our constant surroundings, and the student is encouraged to observe and explain the natural phenomena of the sphere in which he lives. Attention is given to illustration by experiments, performed by the students when possible, or at least thoroughly discussed by him; and also to problem work—not merely arithmetical work, but the testing of the ability to apply laws to special cases, and to express relations in equational form. Familiarity with the English and metric units is expected. *5 hrs., both semesters, Junior year.*

BOOKKEEPING.

The elements of Single and Double Entry Bookkeeping are given. *2 hrs., both semesters, Junior year.*

DRAWING.

The elements of Freehand Drawing with abundant practice are given. *2 hrs., both semesters, Middle year.*

HIGH SCHOOL ENGLISH.

Nevada State University Entrance Requirement.

a. Literature.

Junior Year.

Composition.....Lockwood and Emerson
The Alhambra.....Irving
*The Deserted Village.....Goldsmith
*The Elegy.....Gray
*Selections from Childe Harold.....Byron
(Rome, Greece, Venice, The Coliseum, The Ocean.)
*The Ancient Mariner.....Coleridge
Ivanhoe, or The Talisman.....Scott

Middle Year.

Composition.....Lockwood and Emerson
Sir Roger de Coverley.....Addison

*From Syle's Milton to Tennyson.

*Selections Wordsworth
(The Ode to Duty, To Milton, The Highland Girl, Laodamia.)
*The Cloud Shelley
*Horatius Macaulay
The Vision of Sir Launfal Lowell
Silas Marner George Eliot, and
The Vicar of Wakefield Goldsmith, or
The Tale of Two Cities Dickens
The Merchant of Venice Shakespeare

Senior Year.

Composition Lockwood and Emerson
*The Passing of Arthur Tennyson
*The Transcript from Euripides Browning
*Selections Clough
(Qua Cursum Ventus, Mari Magno, The Lawyer's First Tale.)
*The Scholar-Gipsy Arnold
*Selections Milton
(D'Allegro, Il Penseroso, On Shakespeare, On His Blindness.)
Culture and Behavior Emerson
The Reply to Hayne Webster
Julius Cæsar Shakespeare

b. Grammar—The study of Grammar should be completed and reviewed, if necessary, early in the Junior year. Lockwood and Emerson's Composition contains in Part I a very good review of the subject. In the study of Grammar there should be much and thorough drill in declensions and conjugations, in oral analysis of sentences, and in parsing.

c. Oral Reading and Spelling—There should be constant practice in reading aloud both of prose and poetry. In reading poetry the music of the verse should not be lost sight of; the melody and rhythm of the verse should be felt as emphasizing the thought and as heightening the effect of the piece.

Both reading and spelling are essential qualifications for success in any and all vocations in life. Poor reading and poor spelling should debar the pupil from promotion.

d. Composition—The work in Composition should be based upon a modern text-book, such as Lockwood and Emerson's Composition and Rhetoric (Ginn & Co.). This book correlates the work in Composition with the work in Literature and furnishes material for three years work in Composition. There should be at least one essay a month. This essay, corrected orally in class or by the teacher, should be carefully rewritten by the pupil.

1. In the study of literature in the High School, the primary object is the thorough understanding of the thought and purpose of the writer. To this end the following matters are chiefly to be observed:

(1) The analysis of the pieces read;

(2) The description of the characters, both as to motives and outward appearance;

(3) The explanation of the grammatical and rhetorical questions involved (analysis of sentences, construction of words, figures of speech, prosody, etc.);

(4) The explanation of the literary, historical, geographical, and mythical allusions;

(5) Word-study (definition and derivation);

(6) Observations, suggested by the reading, of men and nature;

(7) The committing of considerable passages to memory;

(8) Some knowledge of the life and times of the author.

2. *Texts:* Syle's From Milton to Tennyson (Allyn and Bacon); Lowell's The Vision of Sir Launfal (Riverside Lit. Series); The Arden Shakespeare (D. C. Heath & Co.); Addison's Sir Roger de Coverley (D. C. Heath & Co.); Emerson's Culture and Behavior.

3. *Books for Reference:* Rich's Dictionary of Antiquities; Gayley's Classic Myths (Ginn & Co.); Greene's Shorter History of the English People; a good Academic Dictionary.

4. *Oral and Written Expression:* Composition is primarily a matter of drill; the end is the eradication of the pupil's most common faults and the cultivation of easy and

*From Syle's Milton to Tennyson.

correct habits of expression. The essays should be short and frequent. The essentials in composition for pupils of the High School grade are: (1) Arrangement and neatness, spelling and punctuation; (2) the construction of short and, as far as possible, periodic sentences; (3) the correct and clear use of pronouns, and (4) a feeling for the correct position of modifiers. The drill upon these points should be persistent.

The conviction is rapidly gaining ground that responsibility for correct and adequate expression, whether oral or written, must rest not upon the teacher of English alone, but upon the school as a whole, and upon each of its departments; *that nearly every school exercise*—whether it be *recitation*, *translation*, *demonstration*, report of experimentation with inference therefrom, or record or statement of any kind—should be subject to criticism of its form as well as of its contents; that in no other way than this can the habit of correct speech and writing, of vital importance in every department, be really enforced.

Furthermore, it is believed that time and effort so spent will in the end prove no loss to the various branches of study, but rather a gain, through the clearness and grasp of thought which is inseparable from clearness and grasp of expression. In order that the best results in written expression may be secured, it is suggested that each teacher in the school might well devote one recitation period at least every fortnight, in each class, to some sort of written exercise growing out of the subject taught, and this throughout the course.

As to oral expression, the attention of principals and teachers is called to the grave deficiency almost everywhere found, both in speaking and in reading. For the improvement of the former, the consecutive (topical) recitation should be insisted upon as a constant factor in almost every course of instruction; and for both, a clearer, more graceful, and more effective enunciation should be habitually demanded.

THE COLLEGE OF UNIVERSITY EXTENSION.

The Comstock School of Mining and Metallurgy at Virginia City, Nevada.

UNIVERSITY EXTENSION.

1. The University Extension "idea" is to extend the influence and benefits of University instruction to men and women who have passed beyond the period of their school or college days and yet wish to grow by means of systematic study into a larger knowledge and wisdom, and thereby make themselves richer in happiness and usefulness.

THE COMSTOCK SCHOOL.

2. The Comstock School of Mining and Metallurgy was organized at Virginia City, Nevada, on the 1st day of October, 1900, and the courses of instruction in Freehand Drawing and in Chemistry began on October 15th. The special object of this School is to promote technical education among men engaged in mining and reducing ores.

THE SCHOOL YEAR.

3. The school year is continuous for twelve months, but for convenience it is divided into terms of three months each.

SUBJECTS OF INSTRUCTION.

4. Two technical subjects of instruction are given each term with the support of such instruction in general subjects as may be necessary.

CERTIFICATES.

5. Certificates of proficiency will be given at the close of each term to the students who pass in all the subjects of that term. The certificates will set forth in detail the subjects of study and the value in University credits. Each certificate will be signed by the President of the University, the Secretary of the Faculty, and the Instructor in Charge.

DIPLOMAS.

6. Each four certificates, numbered consecutively, will entitle the student holding them to a diploma which shall state the subjects covered and their value in University credits. The diplomas shall be signed by the President of the Board of Regents and by the President of the University.

7. COURSES OFFERED.

Mathematics: Arithmetic, algebra, geometry, trigonometry. Calculus and mechanics may be elected.

Physics: General elementary physics; laboratory physics or well-illustrated lectures; mechanics, heat and electricity.

Chemistry: General chemistry; qualitative and quantitative analysis.

Assaying: Assays of gold and silver ores by scorification and crucible methods. Crushing and preparation of samples.

Drawing: Freehand and mechanical drawing; descriptive geometry and graphic statics.

Surveying: The theory of surveying, established by abundant field and mine practice. Map making.

Geology and Mineralogy: Dynamic, structural, historical and economic geology. Descriptive and determinative mineralogy; petrography and crystallography.

Metallurgy: General metallurgy; metallurgy of gold, silver, copper, lead and zinc.

Engineering: Mining engineering shall include engineering structures, the prospecting, development, drainage and ventilation of mines, blasting, mining machinery, and the application of electricity to the engineering of mines.

DEGREES AND CREDITS.

8. The value of the "credit" is the same in all courses of instruction offered by the University.

9. The credits obtained in the University Extension Schools will be accepted by the University toward any undergraduate degree.

10. The Degree of Mining Engineer will be given to any practical miner who has obtained *one hundred University credits* in the courses of study herein offered and who has received in addition *forty credits* for "a perfect knowledge of the practical work of mining," such as prospecting, opening up a mine, timbering, blasting, ore extraction, etc.

11. The examination in practical mining shall be given by such persons constituting an advisory committee from the honorary members of the Comstock Class as may be appointed by the President of the University.

REMARKS.

12. The Comstock Class has now been organized for more than two years, and the results go far to demonstrate that miners and others who do hard work from eight to ten hours per day can pursue daily serious studies, such as algebra, geometry, surveying, chemistry and drawing, with sustained interest.

13. The members of the class have paid all the expenses pertaining to room, light, fuel, and to the maintenance of the instructor. The University has paid the salary of the instructor and part of the laboratory equipment.

INSTRUCTORS.

14. The class work was organized and directed for the first year by Mr. J. Henry Dye, C.E., a graduate of the University of Michigan. The present Instructor in Charge is Alexander Wise, B.S., a graduate of the University of California.

ENROLLMENT FOR THE YEAR 1902.

GRADUATES.

Allen, Alice Leona	Liberal Arts	Silver City
Anderson, George Edward	Mines	Beckwith, Cal.
Arnot, Edwin Percy	Mines	Carson City
Bray, John Carlton	Mines	Reno
Cameron, John Donald	Mechanical Engineering	Virginia City
Case, Seymour	Mechanical Engineering	Paradise Valley
Evans, Elizabeth Mary	Liberal Arts	Reno
Grey, Blaine	General Science	Carson City
Hall, Florence Rebecca	Liberal Arts	Carson City
Jameson, Harry	General Science	Reno
Leadbetter, Benjamin Cleveland	Mines	Reno
Mayhugh, John S., Jr.	Civil Engineering	Elko
McCormack, Elizabeth	Liberal Arts	Reno
Orr, Laura B.	Liberal Arts	Reno
Quinn, Patrick Joseph	Mines	Virginia City
Southworth, Harford E.	Mines	Gardnerville
Springmeyer, George W.	General Science	Gardnerville
Webster, Florence Elizabeth	Liberal Arts	Reno
Young, Marion	Liberal Arts	Greenville, Cal.

SENIORS.

Allen, Carrie Henrietta	Liberal Arts	Silver City
Arms, Miranda Ray	Liberal Arts	Vinton, Cal.
Bradshaw, Marcus Givens	Mines	Reno
Barker, Franklin Edward	Liberal Arts	Carson City
Doten, Goodwin Stoddard	Liberal Arts	Reno
Comerford, James Vincent	Liberal Arts	Virginia City
Ericson, Edward John	Mines	Eureka
Esden, Lillian Estelle	Liberal Arts	Wadsworth
Hesson, Robert Winfield	Mines	Elko
Harrington, Walter Burt	Mines	Virginia City
Hayes, Maurice Pease	Mines	Bridgeport, Cal.
Hunter, William Webber	Mines	Virginia City
Johnson, Anna Sophia	Liberal Arts	Eureka
Kelley, Arthur Leon	Mines	Crescent, Cal.
Kent, Florence Virginia	Liberal Arts	Stillwater
Leadbetter, Evan Percy	Mechanical Engineering	Reno
Levy, Della	Liberal Arts	Reno
Luke, Frank Henry	Mines	Reno
Mack, Joseph Page	Mechanical Engineering	Dayton
McElroy, John Owen	Liberal Arts	Sattley, Cal.
McClintock, Saxe Milton	Mines	Burton, Wash.
McVicar, James Gordon	Mines	Smith
O'Hara, Bernard Francis	Mines	Virginia City
Peckham, James Garfield	Mines	Reno
Rammelkamp, Elizabeth	Liberal Arts	Dayton
Richardson, Mabel Sophia	Liberal Arts	Reno
Shoer, Claude Philip	Liberal Arts	Wells

Snapp, Pearl Evelyn	Liberal Arts	Rebel Creek
Stewart, Elbert Alfred	Mines	Reno
Taylor, Alfred Theodore	Liberal Arts	Susanville, Cal.
Weathers, Olive Eleanor	Liberal Arts	Deeth
Wilson, Hicksey May	Liberal Arts	Reno
Whitaker, Fred	Mines	Durango, Colorado
Wolf, Albert William	Mines	Winnemucca

JUNIORS.

Arnot, Laura	Liberal Arts	Markleeville, Cal.
Blakeslee, Mabel Hayward	Liberal Arts	Reno
Brumsey, Jessie May	Liberal Arts	Carson City
Cameron, Jeanette Evelyn	Liberal Arts	Virginia City
Case, John S.	Mines	Paradise Valley
Catlin, William Prince	Mines	Carson City
Caton, Albert Joseph	Liberal Arts	Gold Hill
Delonchant, Fred Joseph	Mines	Reno
Ede, Allan Samuel	Mines	Reno
Evans, Ben Allen	Mechanical Engineering	Reno
Fay, Lillian Nevada	Liberal Arts	Sheridan
Gibson, Agnes Pearl	Liberal Arts	Reno
Kearney, William Maxwell	Mines	Empire
Kelley, Mark	Civil Engineering	Crescent, Cal.
Nathan, Fred August	Mechanical Engineering	Reno
Plumb, Mabel Grant	General Science	Tuscarora
Price, James Henry	Mines	Virginia City
Rammelkamp, Georgia	Liberal Arts	Dayton
Roberts, Edward J.	Mines	Tonopah
Ruddell, Mary Alice	Liberal Arts	Lovelock
Smith, Frank T.	Mines	Reno
Thompson, Frank Philson	Mechanical Engineering	Pioche
Thompson, William Bryant	Mechanical Engineering	Reno
Weller, Frank A. E.	Mechanical Engineering	Austin
West, George Franklin	Mines	Yerington
Wright, Jno. Wm.	Commerce	Reno
Wright, Nathaniel Davis	Mechanical Engineering	Reno

SOPHOMORES.

Bacon, Mary	Liberal Arts	Reno
Berry, Emily	Normal	Sattley, Cal.
Black, Fred D.	Mines	Virginia City
Bradley, Frank Dean	Mines	Palisade
Brannin, Lucy Rebecca	Liberal Arts	Wadsworth
Bridges, Charles Henry	Mines	Wadsworth
Bull, Charles Edward	Liberal Arts	Reno
Bulmer, Halbert Boswell	Mines	Virginia City
Chism, Harry Cyrus	Mines	Reno
Cooke, Mary Elizabeth	Liberal Arts	Dayton
Damm, Anna Caroline	Normal	Lovelock
Finck, Adolphine Bertha	Normal	Wells
Graham, Frank Warner	Mines	Reno
Hamlin, Helen Hale	Normal	Sierraville, Cal.
Hand, Catherine	Liberal Arts	Sonora, Cal.
Hershiser, Beulah	Liberal Arts	Reno
Julien, Ralph	Mines	Reno
Kerby, Annette	Normal	Reno
Leavitt, Edgar I.	General Science	Yerington
Louderback, Harold	Liberal Arts	San Francisco, Cal.
Lyman, George Dunlap	Liberal Arts	Reno

Maxwell, Alice Henrietta	Liberal Arts	Reno
Nesbitt, James	Mines	Delamar
O'Hara, Philip John	Liberal Arts	Virginia City
O'Neill, Wm. Jas.	Mechanical Engineering	Reno
Orr, Wm. Edwin	Mines	Pioche
Osborne, Charles D.	Mines	Pioche
Palmer, Harry Stanley	Mines	Reno
Palmer, Walter E. S.	Mines	Reno
Patterson, James Druillard	Liberal Arts	Reno
Pearson, William	Mines	Virginia City
Petty, J. Lee	Liberal Arts	Elko
Pike, LeRoy Francis	Liberal Arts	Reno
Pope, William Joseph	Mines	Virginia City
Roberts, Minnie	Normal	Wells
Ross, Ellabelle Tyndall	Liberal Arts	Virginia City
Sadler, Herman J.	Commerce	San Francisco, Cal.
Saxton, Ernest Grant	Mines	Carson City
Sheehy, Gertrude	Normal	Virginia City
Smith, Cassius Crowell	Mines	Reno
Smith, Claude Leslie	Mines	Aurora, Nebraska
Smith, Bertha	Normal	Buffalo Meadows
Smith, Loria	Normal	Buffalo Meadows
Souchereau, Obeline Lydia	Liberal Arts	Verdi
Spellier, Louis A.	Mechanical Engineering	Taylorville, Cal.
Standerwick, Harry Maxwell	Liberal Arts	Battle Mountain
Stark, Charles William	Mines	Tuscarora
Taylor, Jobe Terrill	General Science	Reno
Unsworth, Samuel Seabury	Mines	Reno
Warren, Maude	Normal	Wabuska
Weddle, Walter E.	Mines	Traver, Cal.
Wilkerson, Harry Thomas	Mechanical Engineering	Sheridan
Wise, Olive Nevada	General Science	Battle Mountain
Worthing, Leigh Ernest	Mines	Traver, Cal.

FRESHMEN.

Arms, Mary Emeline	Normal	Vinton, Cal.
Black, Wm. Clair	Mines	Deeth
Blake, Florence T.	Liberal Arts	Virginia City
Blevins, Dollie Adeline	Normal	Peko
Bowler, Emma	Liberal Arts	Hawthorne
Bryant, Louis Parnell	Mines	Wadsworth
Cahill, Alice	Normal	Silver City
Cazier, Helen Elizabeth	Liberal Arts	Wells
Cazier, Henry Halowell	Mines	Wells
Chase, Sarah	Normal	Reno
Clough, Leon	Liberal Arts	Quincy, Cal.
Conaway, Margaret A.	Normal	Big Meadows
Conway, R. J.	Mines	Wells
Cox, Charles LeRoy	Mines	Reno
Dow, Grace	Normal	Michigan Bluff, Cal.
Elliott, Eloise Elizabeth	Normal	Bridgeport, Cal.
Elliott, Leslie Edwin	Mines	Bridgeport, Cal.
Esden, Clarence	Mines	Wadsworth
Friesell, Frank McClaren	Mechanical Engineering	Pittsburg, Pa.
Goble, Alma	Liberal Arts	Wells
Guthrie, Grace	Normal	Winnemucca
Hamlin, Alfred Street	Liberal Arts	Sierraville, Cal.
Hamlin, Eunice Edna	Normal	Sierraville, Cal.
Hardwick, Alice Ellena	Liberal Arts	Silver City

Harrington, Earl Wilmington	Mines	Reno
Hibbard, Geraldine Conger	General Science	Reno
Hobart, Maude Alice	Liberal Arts	Virginia City
Hofmann, Gustav Everett	Mines	Reno
Jameson, Curry	Mechanical Engineering	Reno
Jones, Harry Lawrence	Mines	Elko
Jones, Wendell Phillips	Mines	Eureka
Kerby, Edward Eugene	Mines	Reno
Kline, Arthur William	Mechanical Engineering	Reno
Knemeyer, Bertha Kate	Normal	Yerington
Levy, Jessie Sheyer	Liberal Arts	Reno
Mack, Irene	Liberal Arts	Virginia City
McBride, Bonnifield Gerald	Mines	Elko
McDermott, Laura	General Science	Virginia City
McElroy, Lucile	Liberal Arts	Reno
McGowan, Kate	Normal	Yerington
McMullen, Lulu	Liberal Arts	Deeth
Meginness, Luella	Normal	Candelaria
Melin, John	Mines	Reno
Michelson, Lewis	General Science	San Francisco, Cal.
Mihills, Villa	Liberal Arts	Reno
Myers, Annie Veronica	Normal	Kettle, Cal.
O'Brien, W. J.	Mines	Carson City
Palmer, George Edwin	Mines	Reno
Pepper, Lizzie E.	Liberal Arts	Eureka
Peterson, Harriet Irene	Liberal Arts	Reno
Pike, Frances Ella	Liberal Arts	Reno
Pohl, Fred	Mines	Austin
Pugh, Doris	Normal	Yerington
Pursel, Bertha	Normal	Yerington
Regli, Emma Claribel	Normal	Eureka
Ross, Reine Virginia	Liberal Arts	Virginia City
Scott, John David	Mines	Battle Mountain
Shirley, Maude	Normal	Bishop, Cal.
Shonerd, Henry Gilbert	Mines	Carlin
Sielaff, Alwine Emma	Liberal Arts	Reno
Smiley, John Albert	Civil Engineering	Deeth
Snapp, Mabel	Liberal Arts	Rebel Creek
Steckle, Abram H.	Mechanical Engineering	Reno
Sullivan, Daniel R.	General Science	Virginia City
Taylor, Chester Carlton	Mines	Silver City
Thrall, William B.	Mines	Wadsworth
Tooley, Henry Logan	General Science	Reno
Updike, Daniel Haladay	Mines	Reno
Weathers, Leland Stanford	Mechanical Engineering	Deeth
Weeks, Sadie Jeanette	Liberal Arts	Wells
Welsh, Robert	Mechanical Engineering	Lovelock
Williams, John B.	Mechanical Engineering	Gold Hill
Wilson, Ernest	Mines	Bishop, Cal.
Wrinkle, George Scott	Mines	Thebes, Cal.

NEVADA STATE NORMAL SCHOOL.

GRADUATES.

Benson, Mary Lea	Reno	O'Leary, Aloysia Bernadetta	Virginia City
Bradshaw, Minnie May	Paradise Valley	Peckham, Harriet	Reno
Buchanan, Bessie Sarah	Wadsworth	Roberti, Zena	Willow Creek
Buchanan, Vergil	Beckwith, Cal.	Sanger, Elizabeth	Carson City

Erickson, Regina Ione.....Eureka
Harley, Lillian Martha.....Virginia City
McCormack, Clara Mae.....Reno
McDermott, Lucy.....Virginia City
McMullen, Mattie.....Deeth
Scott, Mary McKee.....Ely
Sweeney, Louise Janette.....Carson City
Treglone, Elizabeth Maude.....Virginia City
Weeks, Harriet.....Wells
Wright, Elizabeth.....Reno

SENIORS.

Berry, Emily.....Sattley, Cal.
Damm, Anna Caroline.....Lovelock
Finck, Adolphine Bertha.....Wells
Hamlin, Helen Hale.....Sierraville, Cal.
Kerby, Annette.....Reno
Roberts, Minnie.....Wells
Sheehy, Gertrude.....Reno
Smith, Bertha.....Buffalo Meadows
Smith, Loria.....Buffalo Meadows
Warren, Maude.....Wabuska

FRESHMEN.

Arms, Mary Emeline.....Vinton, Cal.
Blevins, Dollie Adeline.....Peko
Cahill, Alice.....Gold Hill
Chase, Sarah.....Reno
Conaway, Margaret A.....Big Meadows
Dow, Grace.....Michigan Bluff, Cal.
Elliott, Eloise Elizabeth.....Bridgeport, Cal.
Hamlin, Eunice Edna.....Sierraville, Cal.
Guthrie, Grace.....Winnemucca
Knemeyer, Bertha Kate.....Yerington
Meginness, Luella.....Candelaria
McGowan, Kate.....Yerington
Myers, Annie Veronica.....Kettle, Cal.
Pugh, Doris.....Yerington
Pursel, Bertha.....Wabuska
Regli, Emma Claribel.....Eureka
Shirley, Maude.....Bishop, Cal.

FIRST YEAR.

Cardinal, Josephine.....Topaz, Cal.
Lowrey, Georgella.....Oakland, Cal.
Pursel, Eleanor.....Yerington
McMullen, Rose.....Deeth
Nelson, Jennie.....Tuolumne City, Cal.
Tanner, Florence.....Wells
Walker, Lillian Anna.....Safford

UNIVERSITY HIGH SCHOOL.

SENIOR HIGH.

Araki, Danzo.....Commercial.....Kunomoto, Japan
Becker, Lulu.....Commercial.....Reno
Blum, John.....Science.....Reno
Bradshaw, Belle.....Commercial.....Paradise Valley
Bradshaw, Ila.....Commercial.....Reno
Cardinal, Josephine.....Normal.....Topaz
Champagne, James Arthur.....English.....Yerington
Coll, Edna.....English.....Tuscarora
Cox, Grace E.....Commercial.....Reno
Crowell, Raymond B.....English.....Carson City
Fay, Irma.....English.....Sheridan
Frazer, Clair Vernon.....Commercial.....Wedekind
Ganser, Gertrude.....Commercial.....Battle Mountain
Graham, Mabel Clara.....Commercial.....Reno
Hart, James.....English.....Reno
Hogan, Joseph Cyril.....Commercial.....Reno
Hose, Orville Frank.....English.....Reno
Hunewill, Lucile Eva.....Latin.....Bridgeport, Cal.
Ladd, Lydia.....Commercial.....Lovelock
Lowrey, Georgella.....Normal.....Oakland, Cal.
McBride, Laura.....Latin.....Reno
McMullen, Kate.....Latin.....Deeth
McMullen, Rose.....Normal.....Deeth
Miller, Emilia Margaret.....Commercial.....Reno
Monks, Tony J.....Latin.....Deeth

Nadon, Joseph Alfonse	English	Reno
Nelson, Jennie	Normal	Tuolumne City, Cal.
O'Leary, Frank Robert	Commercial	Lewis
Peckham, Alfred	Commercial	Reno
Peterson, Frank LeRoy	English	Carson City
Pursel, Eleanor	Normal	Yerington
Rainwater, Ada	Commercial	Reno
Sawyer, Robert William	English	Bridgeport, Cal.
Springmeyer, Sarah Jane	Commercial	Reno
St. Clair, Arthur Leo	English	Deeth
Stevens, Gladys	English	Delamar
Tanner, Florence	Normal	Wells
Walker, Lilian Anna	Normal	Safford

MIDDLE HIGH.

Arms, William Street	English	Vinton, Cal.
Avery, Jessie Naomi	Commercial	Reno
Becker, Edith	Commercial	Reno
Branton, Sadie Belle	Commercial	Reno
Burke, Frances Lyle	Latin	Markleeville, Cal.
Carey, Agnes	English	Reno
Case, Irvin	Commercial	Paradise Valley
Cheatham, Austin	English	Reno
Chism, Edward	English	Reno
Church, Alice R.	Commercial	Sattley Cal.
Darrah, Elizabeth	English	Willow Point
Davidovich, Milan	Commercial	Sodaville
Driver, John Rush	Latin	Versailles, Mo.
Freeman, Fred J.	Latin	Sattley, Cal.
Herz, Rudolph R.	Commercial	Reno
Hibbard, Sutherland	Latin	Reno
Hogan, Dora	Commercial	Reno
Holmes, Phemie Jane	Commercial	Reno
Hunewill, Camille	Latin	Bridgeport, Cal.
Mapes, Echo L.	Science	Reno
Mayer, Stuart C.	Science	Elko
McCarthy, Lena	Commercial	Reno
McCutcheon, Sadie	Latin	Beckwith, Cal.
McDonald, Daniel M.	Latin	Ely
McMillan, Zetta	Commercial	Reno
Miller, Isabel	Latin	Gardnerville
Miller, J. Archibald	English	Gardnerville
Morris, H.	Commercial	Sodaville
Peck, Bertha Levada	English	Tuscarora
Ruddell, Jessie Imogene	Commercial	Lovelock
Shirk, Roy	Commercial	Reno
Springer, Susie Belle	Commercial	Reno
Watts, Herbert Earl	Commercial	Reno
Westfall, Vernon Andrew	Commercial	Lovelock
Wilkinson, George	Commercial	McDermitt
Wilkerson, Mabel	Commercial	Carson City
Wilson, Fred William	English	Pine Grove

JUNIOR HIGH.

Abbott, Chas. A. H. L.	English	Reno
Anderson, Edith	Commercial	Beckwith, Cal.
Booth, Kenneth J.	English	Tonopah
Burge, Edith	Commercial	Paradise Valley

Drappo, Lewis C.	Commercial	Reno
Frohlich, August	Commercial	Beckwith, Cal.
Gruss, Roland	Scientific	San Francisco, Cal.
Holland, Harry F.	Commercial	Yerington
Holland, Lydia	English	Yerington
Liston, Frank	Commercial	Caliente
Menke, J. Henry	Commercial	Reno
Nelson, Charles	Commercial	Lovelock
Raine, John Paul	Commercial	Palisade
Ryan, Frank	Commercial	Caliente
Tooley, Elizabeth	English	Reno
Tsumura, Dick	English	Reno
Weber, Lynette	Commercial	Nevada City, Cal.
Whistler, Elmer	Commercial	Glendale

SCHOOL OF DOMESTIC ARTS AND SCIENCE.

Cheatham, Mrs. T. R.	Reno	Shier, Laura	Reno
Gulling, Rose Ailene	Reno	Sunderland, Mabel	Reno
Humphrey, Muzette	Reno	Delonchant, Georgia	Reno
Howe, Bertha L.	Sacramento, Cal.	Michael, Hepburn	Reno

SPECIAL STUDENTS.

Beckwith, Carolyn May	Stenography	Sierra City, Cal.
Bonham, Clyde	Physiology	Reno
Brandon, Edward P.	Mines	Reno
Bray, Mrs. Jno. Edwards	Mathematics	Reno
Browne, G. Clarence	Mines	San Francisco, Cal.
Crampton, Lucy	Commercial	Reno
Davis, Mrs. Martha Owen	French	Reno
Dolan, J. P.	Commercial	Bridgeport, Cal.
Farley, Mrs. Maude E.	Mechanical Drawing	Reno
Fiene, May	Commercial	Wadsworth
Farley, Mrs. Josephine	German	Reno
Gill, Frank R.	Mines	Reno
Gordon, Mrs. C. H.	English	Reno
Lamb, Harry	Commercial	Reno
Mack, Margaret Elizabeth	Liberal Arts	Dayton
McBride, Lucile	Commercial	Reno
Murray, Elizabeth	Commercial	Reno
Newmarker, Lillian A.	Commercial	Reno
North, Angelina	Commercial	Reno
Pike, Cleve	Commercial	Reno
Riordan, Andrew	Mines	White River
Sparks, Charles Meigs	Chemistry	Reno
Steckle, Ivan X.	Mines	Freeport, Mich.
Sunderland, Anna	Domestic Arts	Reno
Sunderland, Beatrice	Liberal Arts	Reno
Sunderland, Mabel	Domestic Arts	Reno
Thyes, Edna	Commercial	Reno
Williams, Mrs. Emma	Commercial	Reno
Williams, Mrs. H. L.	Commercial	Reno
Wilson, Harry Arthur	Mechanical Shop	Reno
Woodward, Chester A.	Liberal Arts	Tuscarora

THE COLLEGE OF UNIVERSITY EXTENSION.

SCHOOL OF MINES AT VIRGINIA CITY, NEVADA.

Students Enrolled October 1, 1900, and in the School January 1, 1902.

Name.	*Occupation.*	*Residence.*
Borlini, Alfred A.	Miner	Virginia City
Canavan, Andrew J.	Miner	Gold Hill
Carew, John J.	Miner	Virginia City
James, John Henry	Miner	Virginia City
McCarthy, T. J.	Clerk	Virginia City
McDonell, Duncan A.	Miner	Virginia City
Stoddard, John H.	Miner	Virginia City
Young, John	Miner	Virginia City
Zabel, Henry E.	Miner	Virginia City

Students Enrolled During the Year 1902.

Beck, Ivan	Virginia City	Mahoney, James	Virginia City
Benner, Edward	Virginia City	Meagher, James	Virginia City
Borlini, Alfred A.	Virginia City	McCarthy, T. J.	Virginia City
Bravin, Bertram	Virginia City	McDonell, Duncan A.	Virginia City
Broili, Frank	Virginia City	McKenzie, William	Virginia City
Canavan, Andrew J.	Gold Hill	McManus, Edward	Virginia City
Carew, John J.	Virginia City	Naleigh, Charles	Virginia City
Carey, Thomas	Virginia City	Ninnis, Frederick	Silver City
Cavanaugh, Frank	Virginia City	Pierce, William	Virginia City
Christian, Henry	Virginia City	Reed, Ralph D.	Virginia City
Conway, James	Gold Hill	Richards, John W.	Virginia City
Corbett, George	Virginia City	Rodgers, William M.	Virginia City
Dewar, John C.	Virginia City	Ross, Gilbert C.	Virginia City
Dietric, John	Virginia City	Ross, John	Virginia City
Drysdale, Geo. H.	Virginia City	Rowlands, Bertram	Virginia City
Evans, Albert	Virginia City	Royer, Reese B.	Silver City
Fallon, Wm. F.	Virginia City	Sexsmith, Wesley	Virginia City
Gallagher, Hugh	Virginia City	Smith, Thomas	Virginia City
Gilbert, Roy	Virginia City	Stoddard, John H.	Virginia City
Hafferon, James	Virginia City	Sullivan, Daniel R.	Virginia City
Harper, Harry	Virginia City	Sullivan, Thomas	Virginia City
Hickey, Martin	Virginia City	Tobner, Frederick	Virginia City
Hunter, Harry	Virginia City	Wisnom, Robert	Virginia City
James, John Henry	Virginia City	Worn, George	Virginia City
James, Lynn	Virginia City	Young, John	Virginia City
Kitson, John	Virginia City	Zabel, Henry E.	Virginia City
Lichtenberg, Edward	Virginia City		

SUMMARY OF ENROLLMENT OF STUDENTS.

School of Liberal Arts—		
Graduates	7	
Seniors	17	
Juniors	9	
Sophomores	16	
Freshmen	20	
		69
School of Mines—		
Graduates	6	
Seniors	15	
Juniors	9	
Sophomores	21	
Freshmen	24	
		75
School of General Science—		
Graduates	3	
Seniors	0	
Juniors	1	
Sophomores	3	
Freshmen	5	
		12
School of Mechanical Engineering—		
Graduates	2	
Seniors	2	
Juniors	6	
Sophomores	3	
Freshmen	7	
		20
School of Civil Engineering—		
Graduates	1	
Seniors	0	
Juniors	1	
Sophomores	0	
Freshmen	1	
		3
School of Commerce—		
Graduates	0	
Seniors	0	
Juniors	1	
Sophomores	1	
Freshmen	0	
		2
Normal School—		
Graduates	18	
Seniors	10	
Freshmen	17	
		45
Total University Schools		226

UNIVERSITY HIGH SCHOOL.

First Year Normal	7	
Senior High	38	
Middle High	37	
Junior High	18	
		100
Special Students		31
School of Domestic Arts and Science		8
School of University Extension		62
Grand total		427
Deducting 16 names counted twice		16
Net total for year 1902		411
Enrollment of young men		235
Enrollment of young women		176

APPENDIX.

The Course of Study herewith given represents the changes made by the Faculty. The new Course of Study will go into effect next year except as to the Modern Languages and Physics.

UNIVERSITY HIGH SCHOOL.

JUNIOR HIGH.

Latin Course.		*German Course.*		*Commercial Course.*	
English	5	English	5	English	5
Latin	5	Bookkeeping	2	Bookkeeping	2
English History	2	Physical Geography	3	Physical Geography	3
Algebra	5	English History	2	Typewriting (5)	2
Drill or Physical Culture	1	Algebra	5	Algebra	5
		Drill or Physical Culture	1	Drill or Physical Culture	1

MIDDLE HIGH.

English	5	English	5	English	5
Latin	5	German	5	Stenography	3
Ancient History	2	Ancient History	2	Commercial Law and Bookkeeping	4
Plane Geometry	5	Plane Geometry	5	or German	5
Drill or Physical Culture	1	Drill or Physical Culture	1	Plane Geometry	5
				Drill or Physical Culture	1

SENIOR HIGH.

English	2	English	2	English	2
American History	3	American History	3	Stenography	4
Latin	4	German	4	American History	3
Physics	5	Physics	5	Plane Geometry and Arithmetic	3
Plane Geometry and Arithmetic	3	Plane Geometry and Arithmetic	3	or German	4
Drill or Physical Culture	1	Drill or Physical Culture	1	Physics	5
				Drill or Physical Culture	1

In the High School, students will not be permitted to take more than eighteen hours, exclusive of Drill or Physical Culture.

In the Commercial Course, if students wish to enter the Science Course their Freshman year, they will take German in place of Commercial Law and Bookkeeping in the Middle High, and German in place of Plane Geometry and Arithmetic in the Senior High.

THE NORMAL SCHOOL.

FIRST YEAR.

Latin Course.		*German Course.*	
English	2	English	2
American History	3	American History	3
Latin	4	German	4
Physics	5	Physics	5
Mathematics	3	Mathematics	3
Drill or Physical Culture	1	Drill or Physical Culture	1

THE NORMAL SCHOOL.

FRESHMAN NORMAL.

English	2
Mathematics	3
Pedagogy	3
Physiology	3
Chemistry (first semester)	4
Psychology (second semester)	4
Public Speaking	1
Drill or Physical Culture	1

SENIOR NORMAL.

English	3
Pedagogy	4
History	3
Natural History	5
Music (2)	1
Drill or Physical Culture	1

COLLEGE OF AGRICULTURE, IRRIGATION ENGINEERING, AND DOMESTIC SCIENCE.

SCHOOL OF AGRICULTURE.

FRESHMAN YEAR.

English	2h	2h
Mathematics	4h	4h
Chemistry: Lectures	2h	2h
Chemistry: Laboratory	2p	2p
Physics: Elementary Laboratory	2p	2p
Agriculture: Breeds of Live Stock and Stock Judging	2h 2p	
Shop Work		3p
Public Speaking	1h	1h
Drill or Physical Culture	1h	1h

SOPHOMORE YEAR.

English	3h	3h
Agriculture: Principles of	5h	
Horticulture		2p 3h
Zoölogy	2p 2h	
Botany		4h
Entomology	4h	
Chemistry: Quantitative		4p
Drill or Physical Culture	1h	1h

JUNIOR YEAR.

Chemistry, Agricultural	2p 2h	2p 2h
Geology	3h	2h 1p
Origin of Soils		3h 1p
Surveying	2h 2p	
Plant Breeding, or Veterinary	5h	
Evolution of Cultivated Plants, or Breeding and Feeding of Live Stock		5h
Drill or Physical Culture	1h	1h

SCHOOL OF AGRICULTURE.

SENIOR YEAR.

Irrigation	4h	4h
Thesis		3u
Elect any three from the following:		
Chemistry	4u	3u
Bacteriology	4u	3u
Pomology	4u	3u
Forestry	4u	3u
Stock Feeding	4u	
Stock Judging		3u
Dairying	4u	3u

SCHOOL OF DOMESTIC SCIENCE.

FRESHMAN YEAR.

English	2h	2h
Mathematics	4h	4h
Chemistry: Lectures	2h	2h
Chemistry: Laboratory	2p	2p
Physics: Elementary Laboratory	2p	2p
Sewing: Mending, Draughting, Machine Sewing	2p	2p
Cookery: Food Values	2p	2p
Public Speaking	1h	1h
Drill or Physical Culture	1h	1h

SOPHOMORE YEAR.

English	3h	3h
Zoölogy	2p 2h	
Botany		2p 2h
History	3h	3h
Physiology	3h	3h
Sewing: Draughting of Skirts and Waists from Charts; Fitting and Making of Dresses from Woolen Materials	2p	2p
Cookery: Dining Room and its Appointments; Serving of Meals	2p	2p
Drill or Physical Culture	1h	1h

SCHOOL OF DOMESTIC ARTS AND SCIENCE.

JUNIOR YEAR.

History	3h	3h
History of Art	1h	1h
Applied Chemistry	2h	2h
Dietetics	2h	2h
Sewing	2p	2p
Cookery	2p	2p
Drill or Physical Culture	1h	1h
Elective:		
French	4h	4h
or		
English	3h	3h

SENIOR YEAR.

Household Economics	2h	2h
Sewing	2p	2p
Cookery	2p	2p

Elect any three of the following:

French	3h	Floriculture	3h
English	3h	Pomology	3h
Bacteriology	3h	Forestry	3h
Dairying	3h		

COLLEGE OF APPLIED SCIENCE.

SCHOOLS OF ENGINEERING.

FRESHMAN YEAR—ALL SCHOOLS.

English	2h	2h
Mathematics	4h	4h
Chemistry: Lectures	2h	2h
Chemistry: Laboratory	2p	2p
Physics: Elementary Laboratory	2p	2p
Shop Work	2p	2p
Drawing: Freehand, 5h	2u	
Drawing: Mechanical, 5h		2u
Public Speaking	1h	1h
Drill or Physical Culture	1h	1h

SCHOOL OF MINING ENGINEERING.

SOPHOMORE YEAR.

Mathematics	4h	4h
Chemistry: Quantitative Analysis	3p	3p
Mineralogy	2p	2p
Physics: General	3h	3h
Quantitative Laboratory	2p	2p
Elementary Machine Drawing	2p	
Descriptive Geometry		2p
Drill or Physical Culture	1h	1h

JUNIOR YEAR.

Surveying	2h 2p	2h 2p
Calculus and Mechanics	3h	3h
Strength of Materials		2h
Graphic Statics	2u 1p	
Geology (and Field Geology)	3h	2h 1p
Metallurgy, General	2h	2h
Assaying	1h 1p	1h 2p
Drill or Physical Culture	1h	1h

SENIOR YEAR.

Mining	4h	3h
Mining: Laboratory	1h	1h
Metallurgy—Gold and Silver	4h	4h
Metallurgy: Laboratory	2p	2p
Hydraulics	3h	
Geology	2h 1p	2h
Engineering Contracts and Specifications		1h
Thesis		2u

SCHOOL OF CIVIL ENGINEERING.

SOPHOMORE YEAR.

Mathematics	4h	4h
Chemistry: Quantitative Analysis	3p	3p
Mineralogy	2p	2p
Physics: General	3h	3h
Quantitative Laboratory	2p	2p
Elementary Machine Drawing	2p	
Descriptive Geometry		2p
Drill or Physical Culture	1h	1h

SCHOOL OF CIVIL ENGINEERING.

JUNIOR YEAR.

Surveying	2h 2p	2h 2p
Calculus and Mechanics	3h	3h
Strength of Materials		2h
Graphic Statics	2u 1p	
Geology (and Field Geology)	3h	2h 1p
Metallurgy, General	2h	2h
Electives (approved C. E. Professor)	2u	3u
Drill or Physical Culture	1h	1h

SENIOR YEAR.

General Engineering	4h	4h
Hydraulics	3h	
Structural Design	4p	
Political Economy	3h	3h
Astronomy		4h
Higher Surveying	2h	2h
Engineering Contracts and Specifications		1h
Thesis		2u

SCHOOL OF MECHANICAL ENGINEERING.

SOPHOMORE YEAR.

Mathematics	4h	4h
Shop Work	3p	3p
Physics, General	3h	3h
Quantitative Laboratory	2p	2p
Descriptive Geometry		2h 2p
Elementary Machine Design	2p	
Advanced Freehand Drawing	2p	
Drill or Physical Culture	1h	1h

JUNIOR YEAR.

Surveying	2h 2p	2h 2p
Calculus and Mechanics	3h	3h
Strength of Materials		2h
Graphic Statics	2h 1p	
Electricity and Magnetism	3h	
Dynamo Electric Machines		3h
Kinematics	2h 2p	
Steam Boilers		3h
Steam Boiler Design		2p
Drill or Physical Culture	1h	1h

SENIOR YEAR.

Steam Engineering and Steam Engine Design	4h	
Valve Gears	2h 2p	
Machine Design	3h 2p	
Thermodynamics	3h	
Mechanical Engineering of Power Plants		4h
Experimental Engineering		1p
Valve and Governor Design		2p
Dynamometers and Measurement of Power		3h
Elective		2h
Thesis		4u

COLLEGE OF ARTS AND SCIENCE.

FRESHMAN YEAR.

Classical Course.		*Science Course.*	
English	2	English	2
Latin	4	French, Greek or German (E)	4
Mathematics	3	Mathematics	3
Physics	2	Physics	2
French, Greek or German (E)	4	Chemistry	4
Public Speaking	1	Public Speaking	1
Drill or Physical Culture	1	Drill or Physical Culture	1

SOPHOMORE YEAR.

English	3	English	3
Latin	3	French, Greek or German (E)	3
History	3	History	3
Natural Science	4	Natural Science	7
French, Greek or German (E)	3	Drill or Physical Culture	1
Drill or Physical Culture	1		

JUNIOR YEAR.

Drill or Physical Culture	1	Drill or Physical Culture	1

ELECTIVES.

Students taking the Classical Course in the College of Arts and Science shall elect all Junior and Senior courses from the following prescribed list of subjects:

GROUP I: Latin, French, German, English, History, Social Science, Mathematics, Chemistry, Botany, Zoölogy, Geology, Physics, Psychology, Pedagogy, Domestic Science—not to exceed one hour in any one semester, nor four hours in all.

Students taking the course in General Science in the College of Arts and Science shall elect all Junior and Senior courses from the following prescribed list of subjects:

GROUP II: Mathematics, Chemistry, Botany, Zoölogy, Geology, Physics, Psychology, Pedagogy, Domestic Science—not exceeding one hour in any one semester, nor four hours in all.

Exceptions to this rule can be made only by vote of the Faculty.

GROUP ELECTIVES.

Each student in the College of Arts and Science shall, at the beginning of his junior year, elect a department in which he wishes to do a considerable amount of work as his major department. In case any student so choose he may elect a minor department also. If a student elects a major and not a minor department, he shall be required to elect forty hours work in the two years with the advice and approval of the head of his major department. The work of the major department shall be the correlating subject of the forty hours group electives. In case a student elects both a major and a minor department, the combined work of the two departments must represent a unity of aim, and the heads of the two departments shall constitute an advisory committee, of which the major professor shall be chairman. In this case, the elective group of forty hours must be selected with the advice and approval of the advisory committee.

Any student after electing his major and minor departments, may, with the consent of the departments concerned and with the consent of the Committee on Group Electives and Graduation Schedules, change his course, choosing another major department or major and minor departments, as the case may be, provided he comply with all the conditions in the case of the new major and minor departments.

Each student shall make a written statement of the work he has accomplished during the Freshman and Sophomore years and of the work he proposes to do under the direction of his major or major and minor professors during his Junior and Senior years. He shall also make a statement of the coördinating aim which gives unity to the proposed group. This statement shall be placed in the hands of the Committee on Group Electives and Graduation Schedules not later than the first week of the University year.

It shall be the duty of the Committee on Group Electives and Graduation Schedules to examine these statements carefully, and, if needs be, to interview the students presenting them and to determine whether such schedules conform to the rules governing the same. If they do thus conform they shall be approved, otherwise the discrepancy shall be pointed out and the student shall be directed again to consult with his major professor.

When any such group of electives has been approved by the Committee on Group Electives and Graduation Schedules it shall be considered as a work prescribed for graduation. Any student who shall complete the work of any such group together with work aggregating twenty hours credit, to be chosen freely within the prescribed groups of departments, shall be entitled to graduate. It shall be the duty of the Committee to determine for each candidate for graduation whether he has completed such work. This committee shall act as a committee, the individual members having no authority outside of committee.

Any student who shall be enrolled in the College of Arts and Science and in the Normal School at the same time shall elect a group of thirty hours with the advice and approval of his major professor, and, in addition, shall take eighteen hours work in psychology and pedagogy and shall elect twelve hours freely under the above mentioned restrictions.

THESES.

The word "thesis" shall be reserved as a name for those written productions which are required of Seniors as a condition to graduation. Other written productions shall be called by some other name, such as paper, report, abstract, synopsis, essay, theme, etc.

Each department in the College of Arts and Science, in connection with the work of which students may write theses, shall offer a thesis course for which two hours credit shall be given. This course may be a one-hour course throughout the year or a two-hour course for one semester.

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